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CANNER PACKER

JANUARY 1960

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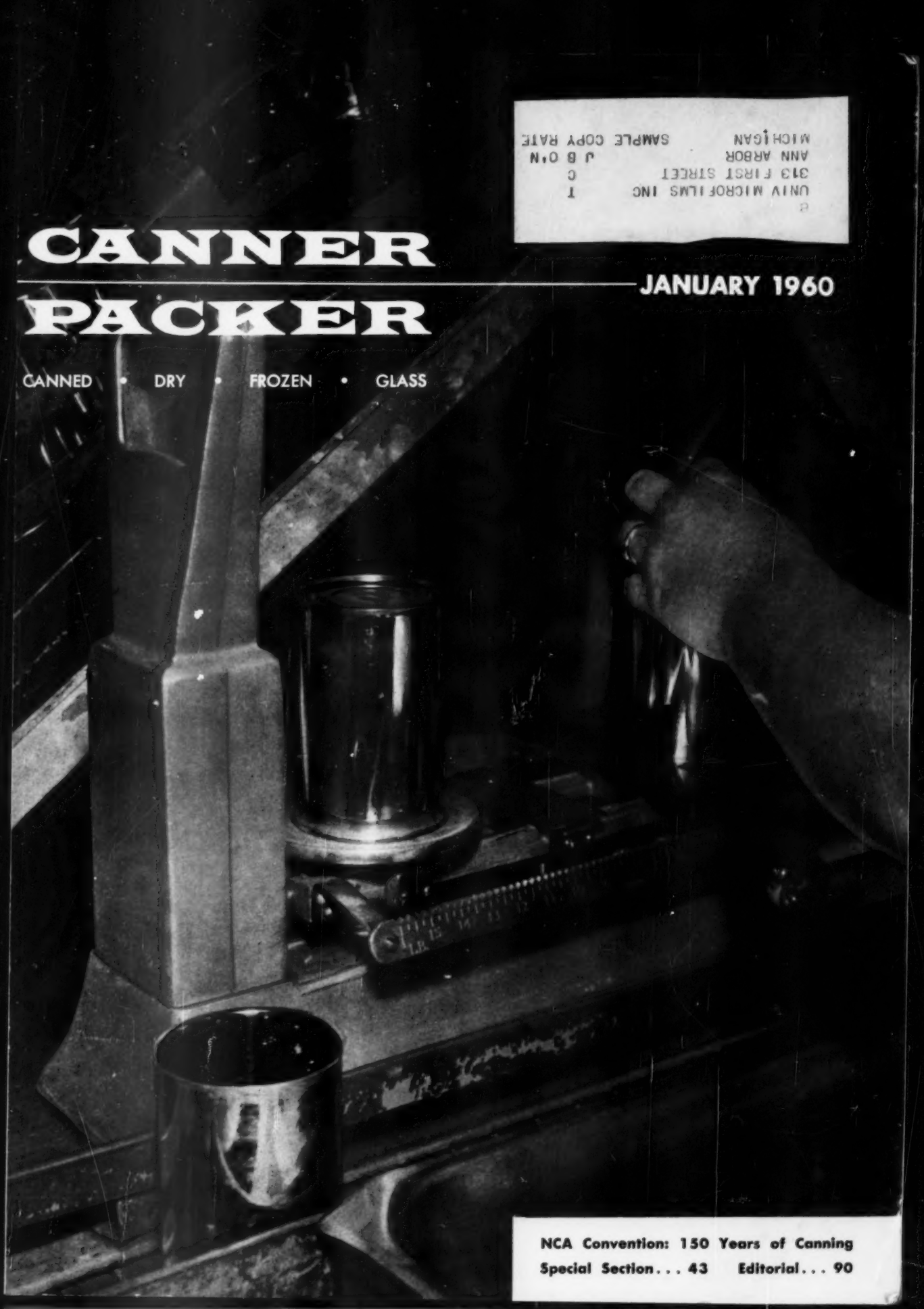


NCA Convention: 150 Years of Canning

Special Section . . . 43 Editorial . . . 90

WHY SHOULD THE VITAMIN C CONTENT OF FRUIT AND VEGETABLE JUICES BE STANDARDIZED?

Because nutrition reports disclose that—

- **Vitamin C deficiencies exist throughout the country***
- **Scurvy has not disappeared from the United States***

Proof of deficiencies among adults and children. You should know these facts!* Diet surveys from Maine and Vermont, New York, Illinois, New Mexico, Oregon, West Virginia, and Texas show a definite pattern of inadequate vitamin C intake. These studies covered grade school and high school children, college men and women.

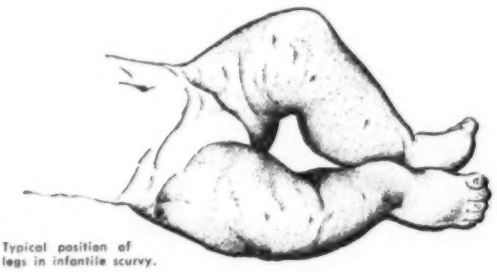
Spongy, swollen gums symptomatic of scurvy.

From these studies* of dietary habits and physical conditions there is considerable proof that many of the children and adults covered by survey have actual, physical symptoms of vitamin C deficiency.

Infantile scurvy. Scurvy* occurs, even today, among infants who are artificially fed. Fortunately the disease may be cured by the administration of vitamin C. How much more sensible it is to prevent it by supplying these bottle-fed infants with the daily allowance of 30 milligrams of vitamin C as recommended by the Food and Nutrition Board of the National Research Council for children under one year of age.

Symptoms of infantile scurvy are fretfulness and fear of being touched.

These bottle-fed infants, unless receiving a pediatric prescription containing vitamin C, are largely dependent on supplemental ascorbic acid which they receive from fruit or vegetable juices. Unless fortified with vitamin C many of the processed juices may not supply these babies with adequate quantities of this essential element.



Typical position of legs in infantile scurvy.

What can be done? Because of the increasing evidence that American diets are deficient in vitamin C, leading nutrition experts believe that processed fruit and vegetable juices, on which the public is so reliant for its supply of this necessary vitamin, should contain the "Vital Ingredient."

The Vital Ingredient of any processed fruit or vegetable juice is a *dependable* and *adequate* supply of vitamin C. You can give your juice this ingredient by *standardizing its vitamin C content*. The processing is simple and the new low cost of ascorbic acid makes juice standardization more attractive than ever.

With ascorbic acid available *by the tons* at extremely modest cost fruit and vegetable juices can have a standardized vitamin C content for the better protection of the nation's health and well-being.

*Statements are based on documented reports. References on request.

Illustrations after photographs in The Vitamins in Medicine by Bicknell and Prescott, Third Edition, published by Grune & Stratton, Inc., New York.

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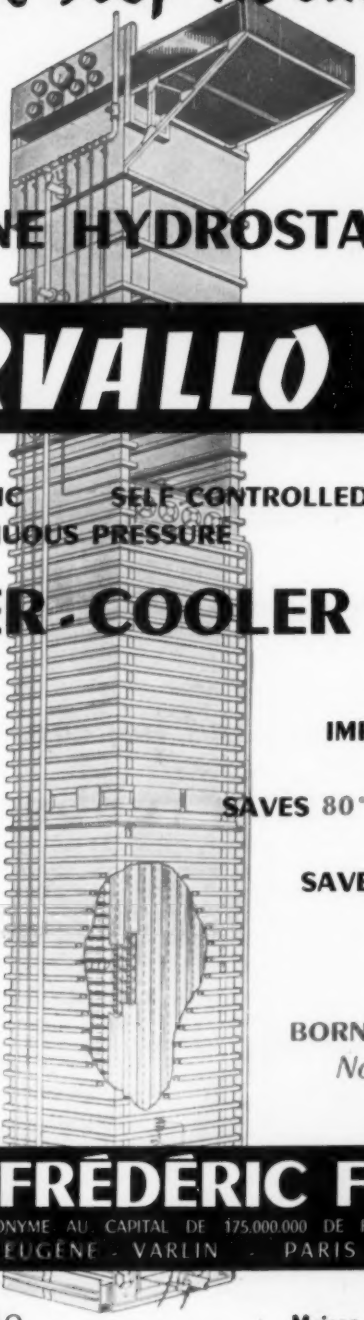

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CANNER PACKER

volume 129, number 1 JANUARY 1960

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COVER: It is a far cry from the hand-filling, hand-soldering methods devised by Nicholas Appert in 1810, but the principle embodied in the technique still proves its merit in modern day filling and closing machines. The canning industry will celebrate 150 years of canned foods during the annual convention of the National Canners Assn., and the Canners Show of the Canning Machinery and Supplies Assn. See page 43.

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Old Dutch Foods, Inc., Blasdell, New York, has a compact layout that saves labor, permits close control.

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Maine Canned Foods, Portland, Me., uses flame throwers and chemicals in cultivating "wild" berries.

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Twenty-one new entrees are packaged by Wilson and Co., in its plant in Fairmont, Minn.

Tomatoes Are Picked by Experimental Machine 40
Michigan State University has working model, but big problems are seen in field practices.

Dried Bean and Raisin Packers Look for Means of Improving Operations . 42
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Canners Convention and Equipment and Supplies Exhibit 43
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EDITORIAL: Canning Revolutionizes Foods in 150 Years 90
A small thing in 1810, but in winter it meant food. For sailors it meant health; for us, today, it means variety.

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In the Next Issue: *The first of a series of four articles, each by an expert in his field, on four different phases of uniform cost accounting for processed food packers. . . New palletless system for handling glass containers. . . How a Connecticut firm makes a success of pie packing in Florida.*

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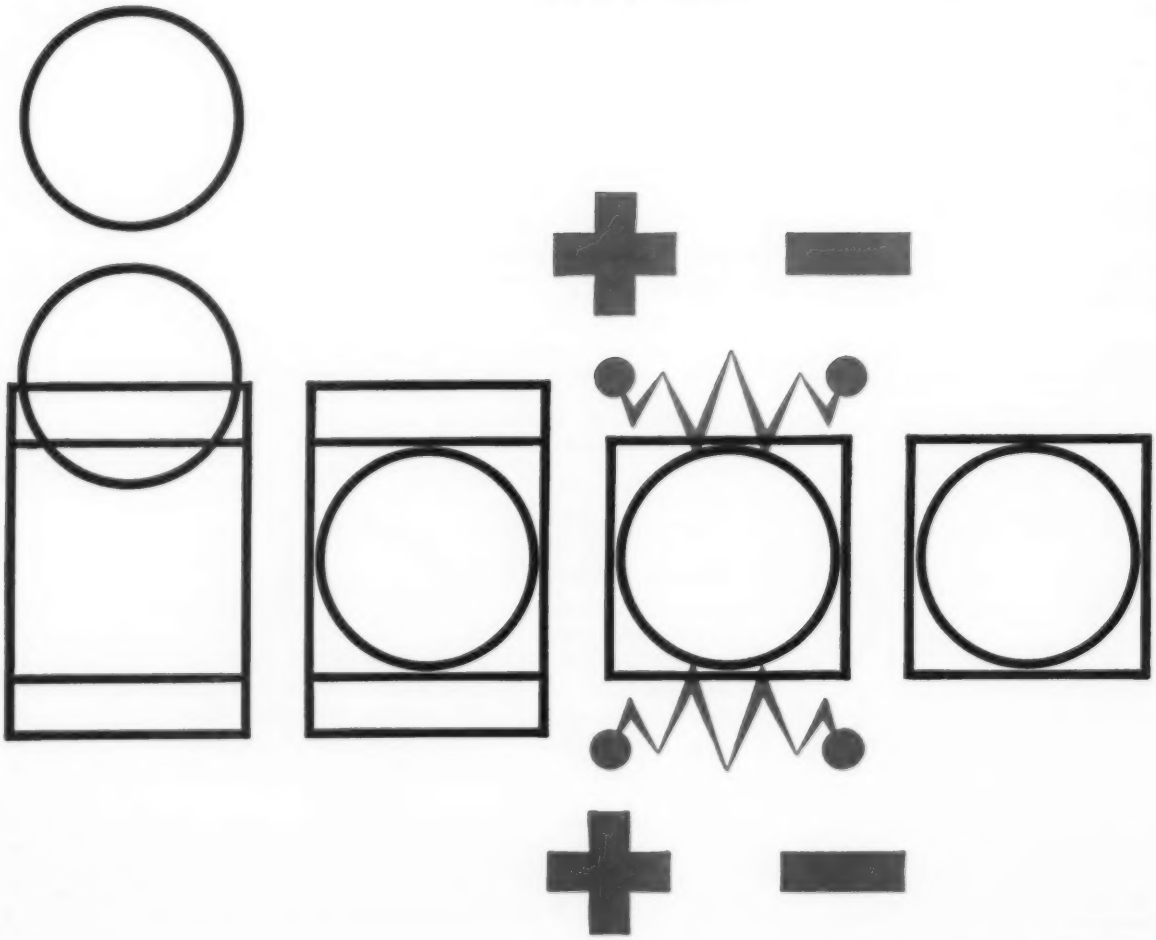


CANNER
PACKER
BUSINESS NEWS LETTER
totally dedicated to serving canned, dry, frozen, glassed food processors

January 1960

In its first annual Outlook Report, contained in the Crops/Packs/Markets/prices department, Canner/Packer foresees undiminished activity in processed foods in 1960. Although 1959 saw many record packs produced and consumed, there will be more in the year ahead, it now appears.

Food canners are expected to produce fruit packs on a par with 1959, to up their vegetable outputs slightly, to cut back on some juices but add to their production of juice-drinks and ades, to pack more soups and more pet food. Glass packers expect a new record pack this year, with gains in honey, peanut butter, pickles, salad dressings, tomato products and gourmet specialties. Freezers are likely to put up moderately more fruits, fruit juices and ades, and to add still further to the national outturn of convenience frozen foods. Dry food packers should show gains in production and shipment of breakfast foods, flour mixes, macaroni and related products, milk items and some specialties.

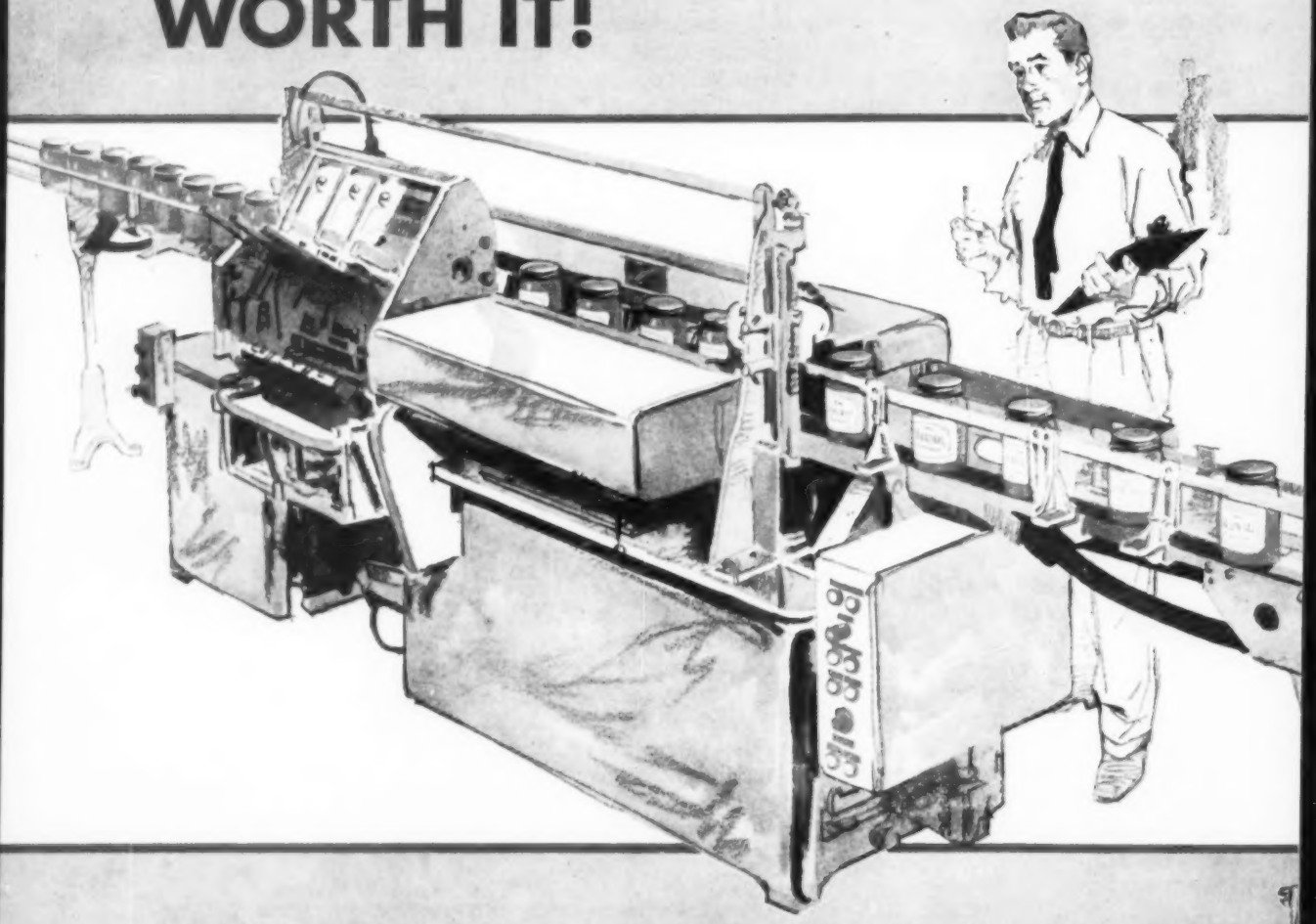
November's cranberry disaster was only the first act in the tremendously serious 1960 drama of the application of the 1958 additives amendment to the U. S. Food, Drug & Cosmetic Act. Provisions of the law become fully effective March 5, 1960, barring all unproven added materials from food products unless such substances (a) are declared safe by FDA because of long usage, (b) are proven safe to FDA's satisfaction by the food packer or his supplier, or (c) in a few rare instances are given further time to demonstrate their harmlessness. Endless problems will arise: There aren't enough experts to pass on all the substances, what's safe for one use isn't for another, FDA's discretionary powers are sharply curtailed, long-used additives will be ruled out, illegal materials will migrate into foods from packages or processing equipment, reliable tests for some substances are lacking. One thing is certain, however--this will be the greatest boon to food technologists in the industry's history.

U. S. canners will journey to Miami, Fla. for the convention of National Canners Assn., and the accompanying exhibit of canning machinery and supplies, January 18-23. This year the industry has a special reason for its annual meeting; 1960 marks the 150th anniversary of the development of the metal can. In 1810 Nicolas Appert of France contributed one of the seven greatest inventions of modern time--the development of the canning and glass-packing process for food preservation--and later that same year King George III of England granted Peter Durand the first patent for use of an iron, tin-coated container to hold preserved foods. Today the cans used in a single year in the U. S., if extended in the conventional end-to-end pattern, would reach to the moon and back six times.

Plant expansions and new facilities have been announced. Sinaloa Valley Cold Storage Corp., Nogales, Ariz., is constructing a $300,000 cold storage warehouse. Winter Garden Citrus Products Corp., Winter Garden, Fla., is building new sub-zero cold storage and new dry storage warehouses. Pillsbury Co., Minneapolis, Minn., will build a $1 million flour mill in Los Angeles. Morton Foods, Inc., will build a $250,000 plant in El Paso, Texas. H. W. Lay and Co., Inc., Greensboro, N. C. has opened its new $400,000 potato chip plant. Lawry Foods, Inc., of Los Angeles is building a $250,000 warehouse. Red Star Yeast and Products Co. will build a new office and laboratory in Glendale, Wis.

"Comparison

THE WORLD SUPER C. M. COSTS MORE . . . AND IT'S WORTH IT!



Test after test . . . in plants of all kinds prove that the WORLD Super C.M. is the most versatile labeler made! That's a strong statement, but we think the facts on these pages back it up. Why not ask your labeling superintendent to compare your present equipment?

WHY PAY MORE? . . .

Basically to protect your labeling operation, *not just for the present*, but for long range needs too. Only the Super C.M. offers you this protection against size changes . . . increased speed requirements or new labeling ideas.

On a straight line amortization basis the Super C.M. actually *only costs pennies more per hour* and *repays you dollars more per hour*. The results more than justify the means. Ask your WORLD Sales Engineer for a specific proposal on your operation. No obligation, of course. We'll be happy to let the facts speak for themselves.

proves it!"

SPEED

Models are available for speeds up to 320 bottles per minute.

VERSATILITY

Any size or shape of container can be run on this machine now or at any future date. Tapered tumblers, bell-shaped containers, flats, rounds, squares, what have you—anything that can be handled by machine can be handled on the Super C.M.

LUBRICATION

A built-in timing system automatically lubricates all bearings on a predetermined basis — no danger of breakdown through a lubrication failure.

ACCEPTANCE

Economic has over 100 machines of this type in actual field installation and operation. The most widely accepted machine in the packaging industry today.

LABOR SAVING

You can put two WORLD Super C.M. Labelers back to back on adjacent packaging lines (right and left hand) and run two machines with one operator.

INSPECTION

The WORLD Super C.M. is an inspector assuring you that a bottle or jar with a cocked or misapplied cap cannot go out to the trade . . . additional insurance that your product can never spoil because the cap is not properly applied.

ADAPTABILITY

Suppose an odd shaped label might be used as opposed to one that is rectangular. Again, the Super C.M. gives you positive assurance that you can handle any size or shape label within the range of the machine.

LABEL APPLICATION

Label application is made in the center as opposed to the end, thereby reducing the effect of off-standard glass or labels to an absolute minimum. An advantage no other machine offers!

ACCESSIBILITY

The label holder is in front of the machine not in back, eliminating the need for the operator to duck back and forth under the machine conveyor.

PREMIUM ABILITY

If your Sales Department decides to run a premium sale requiring a stenciled glue pattern so that the label will have a tear-off strip on it, you can run the glue pattern required.

AIR OPERATED WIPERS

The WORLD Super C.M. Labeler with air-operated wipers permits you to compensate for all off-standard label stock by allowing you to increase or decrease the pressure while running.

LESS OPERATOR TIME

Case studies show as much as three extra operator hours per day can be spent on other things since the man no longer has to hover over the labeler to make sure it will operate and function properly.

AUTOMATION

The Super C.M. has the ability to sense being out of bottles, (Air-O-Matic Drive) . . . the machine automatically slows down when out of bottles and automatically increases its speed as bottles again flow to it. It paces itself to line load requirements.

AMBIDEXTROUS

Do you ever anticipate handling half gallon containers or polyethylene bottles, You can . . . on a Super C.M.

MAINTENANCE

The clean-up operation on a Super C.M. Labeler is simplicity itself (with no heavy gluing mechanism to remove and clean).

REPAIR PARTS

You can buy the electrical parts for the WORLD Super C.M. Labeler in any radio or television store if you ever need them.

FLEXIBILITY

The dynamics of change will apply in the future as they have in the past and quite likely at an accelerated pace. Can anyone then state irrevocably that a package will not change only because it hasn't changed in the past twenty years? The Super C.M. offers you a guarantee against being unable to handle a new package regardless of shape.

PRIVATE LABEL

You can run as many as three or more different labels on the same package at the same time without any loss of operating speed or efficiency. Should you be a private brand packer you can run as many as four different customer labels on one size container simultaneously. No other machine has ever offered this advantage!

Good Labeling Sells!

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Want more profit from your Canning Operations?

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• Check your adhesive. That's where some profit opportunity lies. Because the adhesive is one of the controls that govern your rate of production. And production is profit. Obviously, the more production your present setup will give, the more profit you will earn.

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105TH YEAR

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how it changed the habits of the world

One hundred and fifty years ago, Peter Durand, an English merchant, was granted a patent for vessels of "pottery, tin or other metals of fit materials." Thus, the miracle of the can was born. This early "tin cannister" packaged foods in sealed containers . . . and changed the habits of the world.

Today, not only food but an almost infinite variety of things we use and enjoy comes in metal containers. Beverages, paint, petroleum, chemicals . . . these are just a few of the products brought to us conveniently, economically . . . by the "miracle of the can."

Can manufacturers everywhere, in the U.S. and abroad, are enthusiastically preparing to participate in the Sesquicentennial of the Invention of the Metal Can. You may want *your* company to take advantage of this great opportunity to tie in with this important observance. The Sesquicentennial may be used as a springboard for stories, advertisements and promotions that can serve each organization's special needs.

American Can Company is proud to be a part of this great industry as it observes its 150th anniversary. Canco's continuing program of research and development is pledged to provide still better packaging for the products of agriculture and industry.

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Whatever your packing problem may be, Cerelose dextrose sugar will help you turn out a product with the sparkle, freshness and eye appeal consumers prefer.

For technical assistance in adapting the food enhancing properties of Cerelose to your needs, call on our technical representatives. Backed by many years of food processing experience and a wealth of firsthand data gathered from canneries throughout the nation, the man from Corn Products can show you how Cerelose will improve your next pack. Contact our nearest sales office or write direct.

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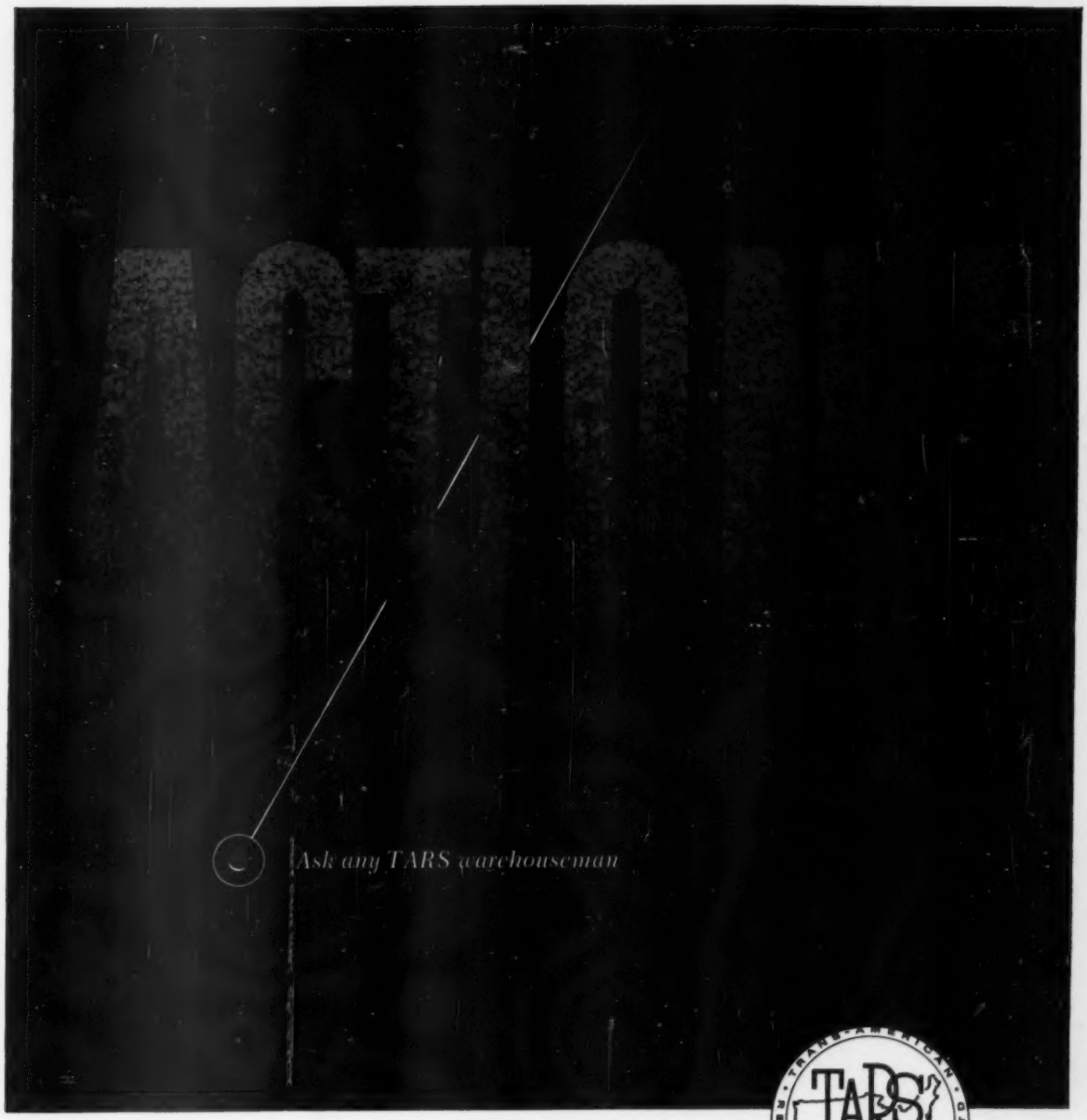

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ANCHOR HOCKING'S COMPLETE LINE LETS YOU SELECT THE RIGHT GLASS CONTAINER AND CLOSURE TO HELP YOU MEET THE INCREASED COMPETITION! More new products of every kind will be introduced during the 1960's. This means more and more competition for the consumer's dollars.

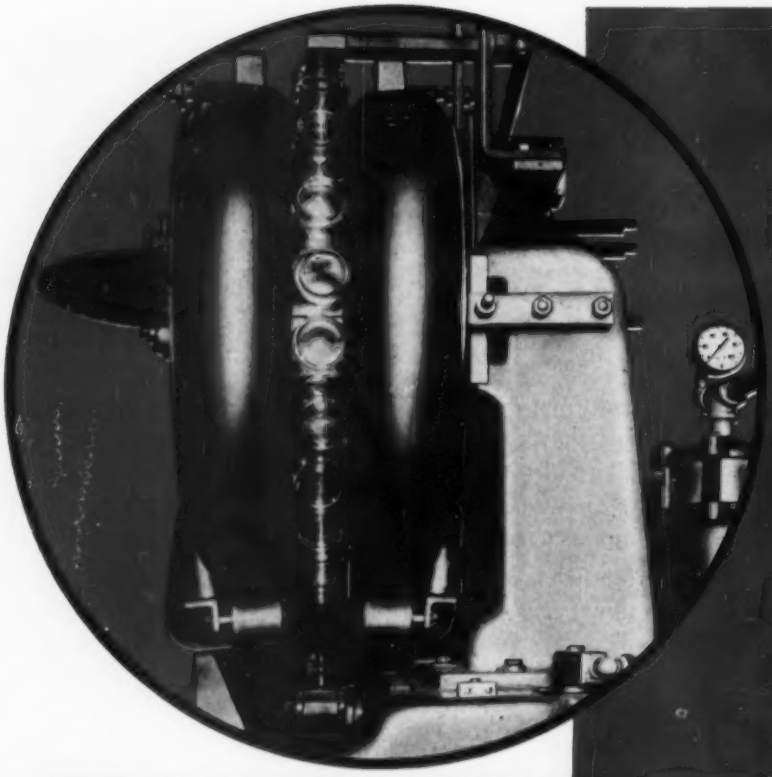
How big a share of these dollars you get may well depend upon your product's package. To help you package your products most attractively and effectively for the competitive markets of the 60's, Anchor Hocking offers a complete line of glass containers and metal and molded closures.

Anchorglass® containers are available in crystal, amber, emerald green or georgia green glass—in all standard styles, sizes and finishes. And no matter what you package in glass—hot or cold, with or without vacuum, sterilized or processed—there's an Anchor® cap and Anchor sealing machine to meet your individual requirements. Anchor Hocking's complete line provides important glass packaging flexibility and capacity to help you meet your challenge of the 60's. Anchor Hocking Glass Corporation, Lancaster, Ohio—bringing you the extra values of *specialization* in glass packaging.

ANCHOR HOCKING

Get set for the exciting 60's with Anchorglass Packaging —put an Anchor Man on your team

Welcome to Booth 129, Canners' Show



IT'S MORE *gentle*

A pair of softly resilient air inflated Neoprene tubes hold the containers firmly yet gently, from start to finish.

MORE *speedy*

Continuous operation eliminates transfer time — containers go straight through without interruption of pace.

MORE *flexible*

Because the inflated tubes automatically adjust to fit a range of sizes, change parts are eliminated.

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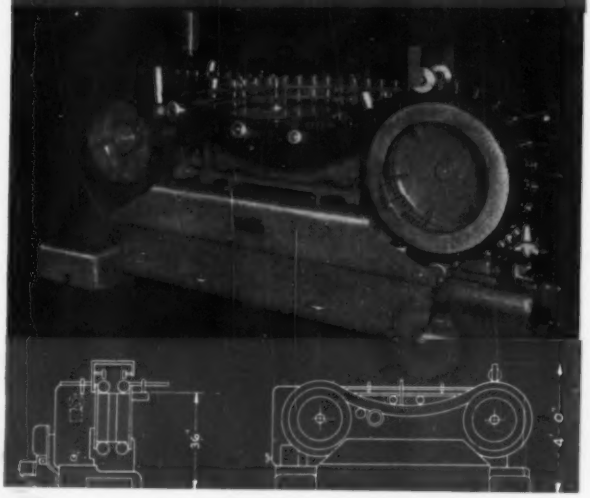
For wide mouth containers and funnel neck bottles



HERE'S a cleaner without a single dial, star, helix or screw feed in its entire design. There are no cams, no links, no rocking nor reciprocating motions. No wonder PNEUMACLEAN is so far ahead of the field in automatic air cleaning.

The containers ride an endless air cushion that holds them safe and sure, and carries them swiftly through the cleaning operation. They're inverted for the cleaning air blast, righted again and out they go, without even a momentary pause. Speed, up to a fabulous 500 per minute, depending on size.

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Furthermore, when you add Vitamin C to fruit juice blends, you protect your products against color and flavor fading that may result from oxidation during shelf life.

Pfizer, a leading producer of vitamins for 20 years, supplies vitamin C (ascorbic acid) in convenient, easy-to-handle forms. Write today for full details about vitamin C fortification and the valuable competitive advantage it will give your brand.

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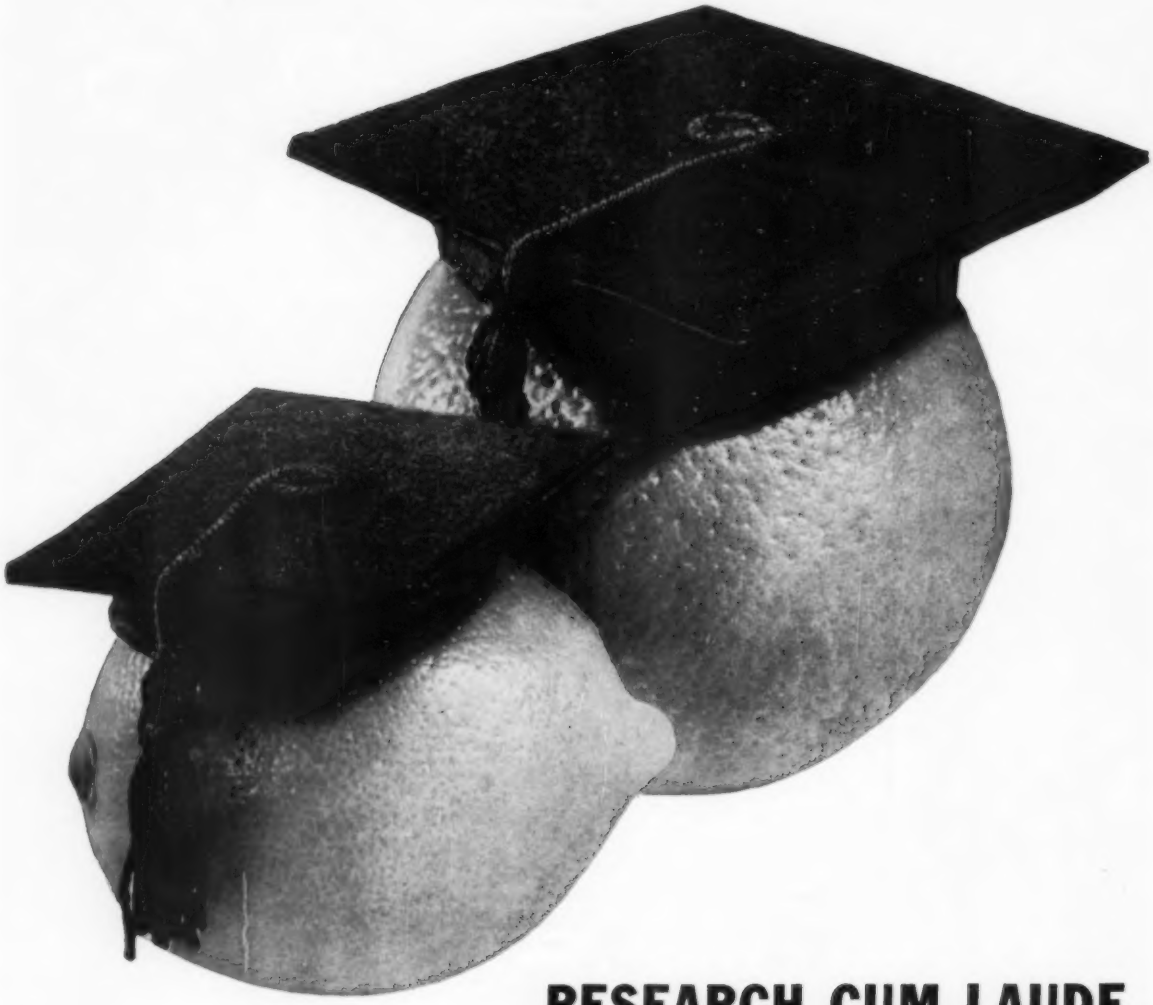
for the Food Industry
for Over a Century



RESEARCH CUM LAUDE AT YOUR SERVICE!

You can profit from Sunkist's citrus research—pioneering work that has been awarded 118 individual U.S. food processing patents.

It's at your service to help you convert "good" products into *superior* ones...cure production headaches...develop new products.

Sunkist research has already created over 400 products for industry out of California lemons and oranges—and discovered new uses for citrus in everything from pharmaceuticals to shrimp freezing.

Exchange

Sunkist technical experts will be glad to work *with* you—in your own plant—or *for* you—in their own citrus research laboratory. Write, and a Sunkist man will call on you.

Sunkist Growers

PRODUCTS SALES DEPARTMENT

CAN LEMON JUICE DO A JOB FOR YOU?

If you're a food processor... fresh, frozen or canned...fruits and vegetables...fish or fowl... lemon juice can do *at least* one thing for you:

- It can prevent or retard off-flavor tendencies...
- Maintain and even enhance natural food flavor—keep food fresh-tasting longer...
- Prevent oxidation, preserve color, texture and flavor during and after processing...
- Adjust acidity in low-acid foods–retard enzyme action...
- Replace salt in low-sodium diet foods...

And that's only a beginning. The list of jobs lemon juice can do is an extensive one.

If you're not using it...you may be letting the competition get a lead on you. Don't market a product that's merely "as good as" the rest. Exchange Brand Concentrated Lemon Juice—made by Sunkist—can often make it superior for only a penny or two—and add a selling ingredient of distinction to your label.

Why not let your Sunkist man talk it over with you?

The address: Sunkist Growers, Products Sales Dept., 720 E. Sunkist St., Ontario, Calif.

LETTERS FROM READERS

Around the World Display Service

We are disappointed and concerned about the steadily declining volume of exports of American-manufactured products to world markets. In order to build up export trade, our company is offering the full services of our 'Round World' organization which includes our agencies and offices abroad. This opportunity is being made available to selected manufacturers across the country.

Manufacturers will be able to exhibit their products in a section of our aluminum containers, which are being especially adapted for this purpose. The containers will be put aboard our vessels and shipped to ports around the world. This service will be free of charge. We do not want "Made in U.S.A." to become a forgotten phrase.

JAKOB ISBRANDTSEN
President, Isbrandtsen Company, Inc., 26 Broadway, New York City.

Help for Indonesia

The U.S. Government through its International Cooperation Administration has contracted with the University of California to establish an engineering college in Indonesia. This college is a part of the University of Gadjah Mada.

Food Processing has always been a great problem in this country, primarily because of the lack of qualified technicians. A current project at Gadjah Mada is an attempt to revitalize the national canning industry. For this reason we would like to request an article published by you in 1927. Ball, C. O., *Theory and Practice in Processing*, Vol. 64, p. 27-32.

JOHN A. HARVEY
Asst. Coordinator, Engineering-Gadjah Mada Project, University of California, Los Angeles, Calif.

• *We are having a copy of the article made and will send it to Reader Harvey, posthaste*—Ed.

Frozen Food Prices

I note that in the CANNER/PACKER price pages, you quote frozen fruit and vegetable prices for different regions of the United States. In connection with some research work we are doing concerning the marketing of frozen peas, this type of information would be quite useful to us.

Would you please let me know what this data is based on and for what period you have been publishing it.

HARVEY M. HUTCHINGS JR.
Agricultural Economist, Oregon State College, School of Agriculture, Corvallis, Ore.

• *Frozen foods prices (FOB packing plant) have been published only since July, 1959—Ed.*

No Federal Order for Red Cherries

In your December issue on page 54, you printed a reference to a talk I made in Milwaukee before the Wisconsin Canners Assn. I feel that this article was not representative of what I said and was poorly reported.

Our association is entirely a voluntary cooperative and does not use marketing orders in any respect.

B. I. FREEMAN
Secretary-Manager, Cherry Producers Marketing Cooperative, Inc., 345 State St., S.E., Grand Rapids 3, Mich.

• *Apologies to Mr. Freeman, who in his Milwaukee speech said that he believed that Federal marketing orders should not be used to control the price of a commodity, but that they were helpful in financing research and promotion for such highly specialized products as RSP cherries. However, (and here our reporter erred) Mr. Freeman's cooperative does not have either type at the moment*—Ed.

Washing System Modernized

The cover picture on the October issue of Canner/Packer, showing a picture of the Idaho Potato Processors plant washer operation, is an old print, which is not representative of the new equipment installations . . . We have since changed that phase of our processing line.

R. R. Bohannon
Vice-president and general manager, Idaho Potato Processors, Inc., P. O. Box 749, Burley, Idaho.

• *Our apologies to IPPI for having selected an out-of-date picture to feature in the October issue*—Ed.

Transportation of Foods

You may be interested to know that the 14th National Conference on Handling Perishable Agricultural Commodities will be held at Purdue University, Lafayette, Ind., Feb. 29 through Mar. 30.

MILTON WORKMAN
Associate Professor, Horticulture Dept., Purdue University, Lafayette, Ind.

Morton '999' Salt is one ingredient that never varies in quality

Quality-conscious food processors, canners and packers from coast to coast are using Morton '999' Salt because it is the one ingredient you can always depend on for unvarying high quality. In fact, the constant quality of '999' Salt has become the standard of the food industry. With Morton '999' Salt you insure a cleaner, more uniform flavor in all of your processed foods.

Morton '999' is an economical premium-grade salt entirely free from bitter calcium and magnesium compounds that can distort flavor and downgrade product. Morton '999' is always 99.9% clean, pure sodium chloride, exceptionally low in the trace metals copper and iron.

'999' is available everywhere—accept no substitute. Morton '999' is the highest purity salt commercially available anywhere in the United States. '999' quality never varies from shipment to shipment, whether you buy it in bulk for direct salting, or in tablets made to your own specifications—either straight or blended with other flavoring agents. Send for complete information today!

Please send me more information about Morton '999' Salt

Name _____
(Please Print)

Title _____

Company _____

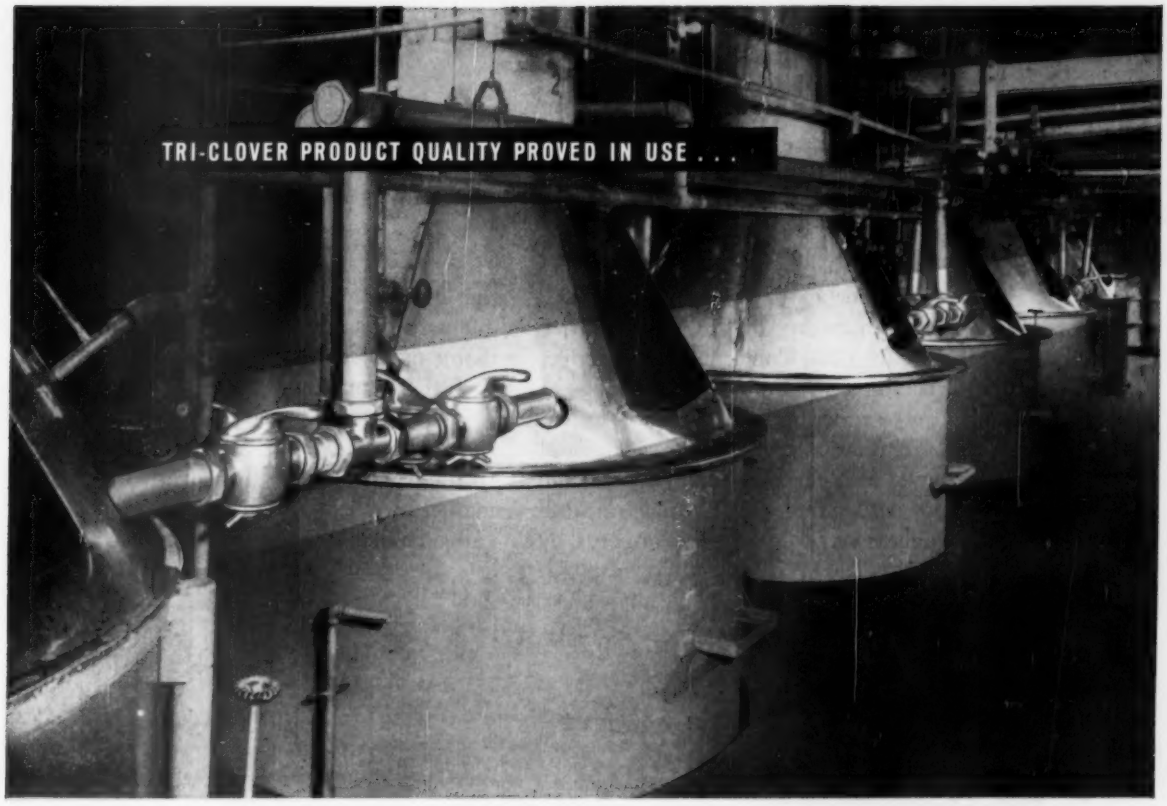
Address _____

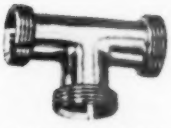
City _____ *Zone* _____ *State* _____

MORTON SALT COMPANY

INDUSTRIAL DIVISION

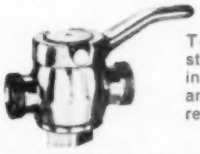
Dept. CP1 *, 110 N. Wacker Drive, Chicago 6, Illinois*





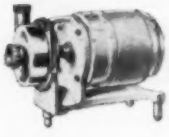
Tri-Clover stainless steel "standard" sanitary threaded fittings with bevel seat construction.

Tri-Clover Tri-Clamp fittings offer quick easy assembly and disassembly; long trouble-free fitting life.



Tri-Clover stainless steel valves are made in a full range of types and sizes to meet every requirement.

Tri-Clover full-flow magnetic traps employ an Alnico magnet to assure maximum removal of tramp metal.



Tri-Clover centrifugal pumps are fabricated of highest quality corrosion-resistant metals for efficient long-term service.

Series of Tri-Clover Valves serve HUNT FOODS Plant for almost 20 years

The "battery" of Tri-Clover stainless steel valves shown above are being used in the Hunt Foods, Inc. plant at Fullerton, California, in an atmospheric evaporator process for producing the well-known Hunt's tomato sauce. An "ordinary" installation, perhaps, except that *these same Tri-Clover valves have been giving reliable, trouble-free service in this plant for almost twenty years!*

Here is an outstanding example of the high quality material and workmanship that's "built-in" to the complete line of Tri-Clover stainless steel fittings, valves, pumps and tubing.

Why not let Tri-Clover quality products help to achieve new standards of efficiency and sanitation in *your* processing operations? Let our engineering staff help in solving your specific corrosion-resistant liquid or semi-solid conveying line problems.

See your nearest Tri-Clover Distributor.

TRI-CLOVER

S-659

LADISH CO.

Tri-Clover Division

Kenosha Wisconsin

IN CANADA: Brantford, Ontario

EXPORT DEPARTMENT: 8 South Michigan Avenue, Chicago 6, Illinois Cable TRICLO, CHICAGO

CONTINENTAL REPORTS TO YOU ON

6 years of unique

The 150th anniversary of the canning industry is the sixth anniversary of the *Merchandiser Digest*. Born in 1954, Continental's attractive, idea-filled tabloid has brought the message of canners to the supermarket buyers and executives month after month. Display ideas and photos have been carried in abundance from every part of the country. Hundreds of product campaigns have been given impetus by the "Promotion Pointers" column, and frequent color inserts. We are grateful for the many expressions of commendation from both the canning and supermarket industries. And we are determined to make the *Canned Foods Merchandiser Digest* more informative and more useful than ever to the supermarket men who purchase and promote your canned foods.

Article below reprinted from November 1959 issue (much reduced in size)

CANNED FOODS MERCHANDISER DIGEST

CANNED FOODS: 150 YEARS OLD

1960 will mark the 150th anniversary of the invention and practical application of the first metal can. It was in 1810 that the English inventor Peter Durand received the first patent on an all-metal container. In a century and a half since, the metal can has grown to play an increasingly important role in economic, industrial and social lives of all nations and all peoples.

Convenience

The terms "convenience food" and "supermarket" might never have become parts of the American vernacular without that significant packaging invention – the metal can. For it is the metal can – 98% steel – that is the grandfather of all convenience food items, and it is the metal can that still offers the greatest variety of easy-to-prepare foods.

Volume

In 1958, canned foods accounted for $4,438,000,000 in supermarket sales. With the exception of fresh meat and produce they were the heaviest dollar producers to move across the checkout counters.

Volume and turnover alone make canned foods the heart of our whole low-cost, self-service distribution setup. They are possibly the one single category of products the modern supermarket operator must sell in order to stay in business. Without them, his already high cost of operation would be prohibitive.

One regional chain executive recently summed it all up when he said: "Canned foods are the backbone of our stores. Because of their low handling costs, lack of need for refrigeration and specialized personnel, they can do more for us from a net profit standpoint than any other category of items. . . .

Basic Facts

In a two-year study of 247 retail food organizations operating some 34,000 supermarkets around the country, the following basic facts on canned foods were pinned down:

- **They account for an average 21% of total store net profit**
- **They account for approximately one-sixth of total store sales**
- **They yield an average gross profit of 16%**
- **They cost less to handle than any item or category of items in the supermarket**

Turnover

Markup alone makes canned foods the fourth most profitable category of food items in the store, led only by meat, produce and various other varieties of grocery products. But – where the average high-markup item may turn over at the rate of six or seven times a year, canned foods may turn over anywhere from 20 to 32 times a year.

Least Cost of Handling

Where some high profit foods may cost 5% and better to handle, canned foods let the retailer off with a rock-bottom 1½ per cent levy.

Compare the fancy markups on some foods and non-foods in terms of high priced personnel, valuable man-hours, high priced equipment and waste, with canned foods. In this light, canned foods begin to assume their true profitable dimensions.

Here is the one product left in the supermarket that can be unpacked, price marked and placed on the shelf by the greenest stock boy with full assurance that it will more than adequately handle its own affairs.

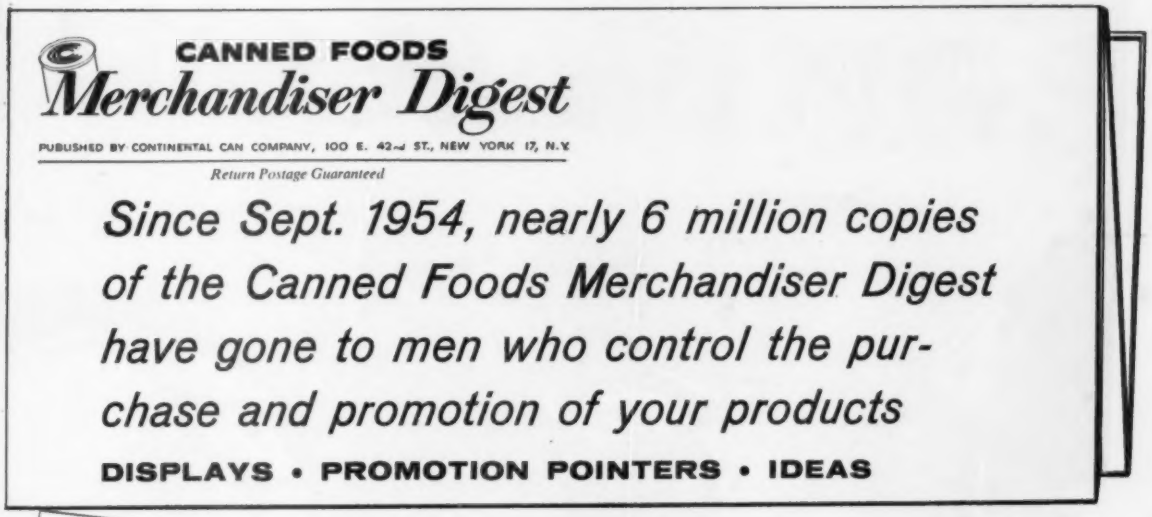
Dependable Leadership

With the improvement of the can-making and canning process, canned foods have pioneered the development of new markets and product classifications. Pointing the way to greater sales for the retailer, less time in the kitchen for the housewife have been such innovations as canned baby foods, dietetic foods for the elderly and gourmet products. The gourmet canned foods market is on a decided upswing through the development of new recipes and processing techniques.

As we enter an age of automation, we find no category of products better suited to push-button store operation than canned foods. As old as yesterday, as new as tomorrow they will continue to stand out as the consumer's food buy, the food industry's most versatile dollar earner.

See you at the Canners' Convention January 17-20, Bal Harbour, Florida

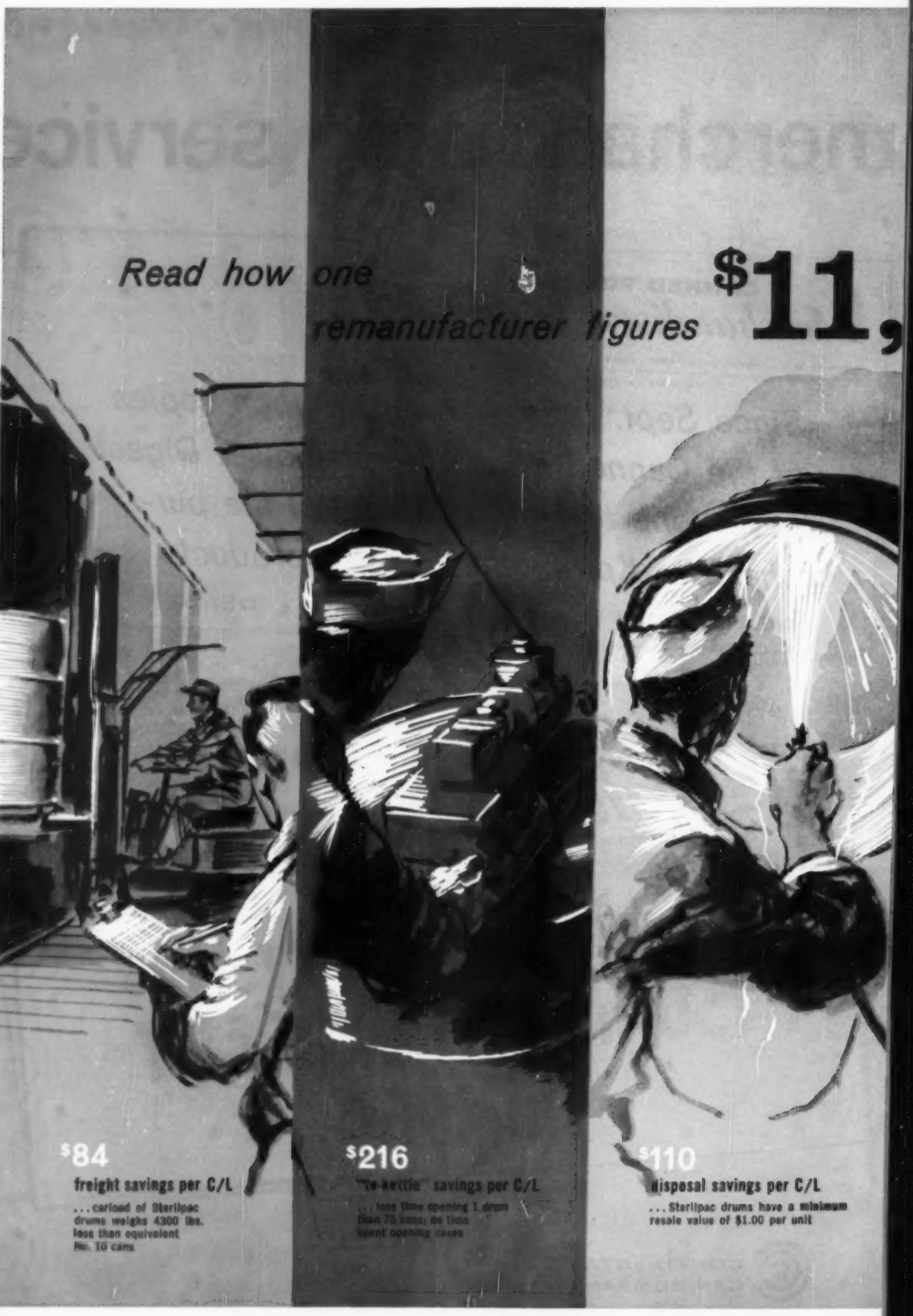
merchandising service


CANNED FOODS
Merchandiser Digest
PUBLISHED BY CONTINENTAL CAN COMPANY, 100 E. 42nd ST., NEW YORK 17, N.Y.
Return Postage Guaranteed
Since Sept. 1954, nearly 6 million copies of the Canned Foods Merchandiser Digest have gone to men who control the purchase and promotion of your products
DISPLAYS • PROMOTION POINTERS • IDEAS

Page One headline, November 1959 Issue

CANNED FOODS
Merchandiser Digest
NUMBER 64
CONTINENTAL CAN COMPANY, 100 E. 42nd ST., NEW YORK 17, N. Y.
NOVEMBER 1959
Canning Industry Has 150th ANNIVERSARY In 1960

CONTINENTAL CAN COMPANY
100 E. 42nd St., New York 17, N.Y.


Read how one remanufacturer figures $11,
$84
freight savings per C/L
. . . carload of Sterilpac drums weighs 4300 lbs. less than equivalent No. 10 cans
$216
"Te-kettle" savings per C/L
. . . less time opening 1 drum than 75 cans; no time spent opening cases
$110
disposal savings per C/L
. . . Sterilpac drums have a minimum resale value of $1.00 per unit

000 SAVINGS

by ordering concentrates in Rheem STERILPAC Drums

These are not Rheem figures. They are figures calculated by a prominent East Coast remanufacturer who estimates he will save $501 per carload by ordering tomato concentrates in Rheem STERILPAC Drums instead of No. 10 cans. Based on his 1959 requirements of 22 carloads, savings come to $11,022... leap to $16,000 on expected 1960 requirements.

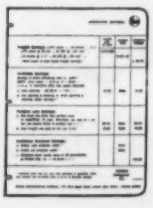
STERILPAC is a brand-new method—revolutionary in concept—that permits food remanufacturers to order concentrates in 55-gallon drums. Each king sized container is equivalent to 75 No. 10 cans. You open, empty and wash only *one* drum instead of 75 cans. No cases to open, either! In addition, STERILPAC drums weigh less, take up less storage space and bring better resale value than the smaller containers. Result: sweeping savings in freight, handling, disposal, product loss and storage costs.

Better concentrate quality comes as a bonus. By sterilizing and flash cooling concentrates *before* they are packed in the STERILPAC drums, canners eliminate potential stackburn. There are no additives involved... no refrigeration required. STERILPAC drums have been shipped across the Equator, and stored outdoors under non-freezing conditions with absolutely no loss of product quality.

Ask your supplier to send you a trial shipment in Rheem STERILPAC Drums, or write to the world's largest manufacturer of steel shipping containers for more information: Rheem Manufacturing Co., 1701 West Edgar Road, Linden, N. J.

Rheem

Figure your own savings with this easily-completed estimate form. Send for it today!



Which Pump is best for your Product?

TOMATOES
DOUGH
BEER
LARD
LATEX
MILK
CHEESE
CORN SYRUP
FRUITS
CHEMICALS
LARD
STARCH
EGGS
SAUSAGE
LIQUID SUGAR
FROSTING

RELISHES
BEER
FRUITS
EGGS
LARD
MILK
GLUE
PAINT
LATEX
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STARCH
GLUE
RELISHES
TOMATOES
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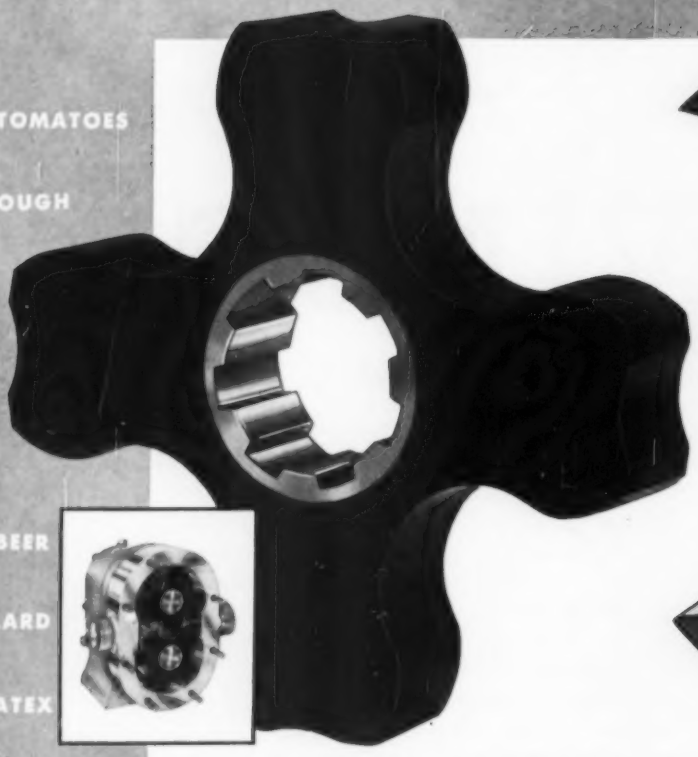
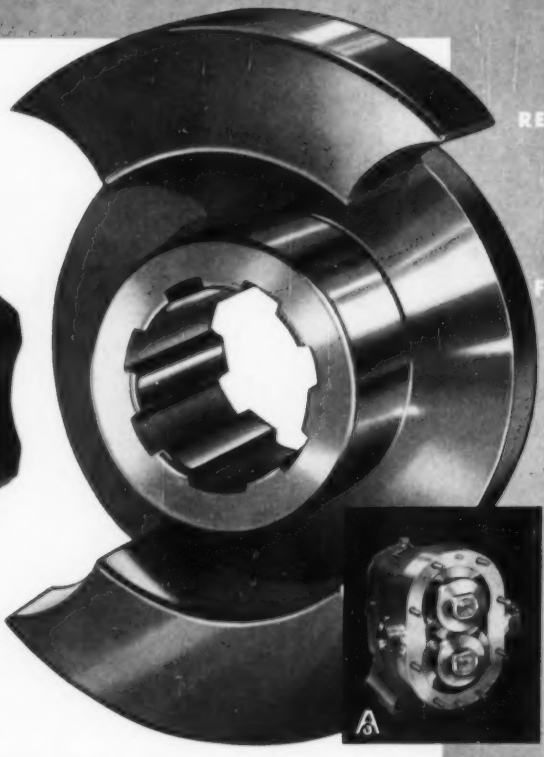
BABY FOOD
DOUGH
COSMETICS
MAYONNAISE

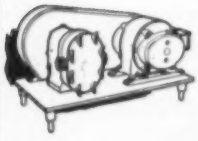




only WAUKESHA offers you a choice of rubber or metal impellers

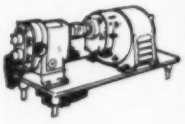
Your product demands a *specific* size and type positive displacement pump. The proper selection is the most important factor in obtaining *maximum* pump life and the assurance that your plant keeps on stream — always.

Only WAUKESHA offers you *more than* 500 positive displacement pump combinations . . . a type and size *specifically* engineered to handle your product. You select *exactly* what you need . . . no compromising — ever.

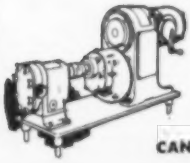


Only WAUKESHA offers you a choice of metal or rubber impellered pumps for capacities from 0 to 300 G.P.M.

Only WAUKESHA offers you corrosion-resistant pumps in both Waukesha Metal (nickel alloy) or 316 Stainless.



Only WAUKESHA provides the specialized engineering assistance built on more than 5 decades of experience in the design and manufacture of sanitary positive displacement pumps.



Representatives in all major cities. Call your distributor or write . . . **WAUKESHA FOUNDRY CO., DEPT. 39, WAUKESHA, WIS.**

CANNERS SHOW — **BOOTH 133**

WAUKESHA FOUNDRY COMPANY

The largest producers of sanitary positive displacement pumps

WELCOME to BOOTH 119

NATIONAL CANNERS CONVENTION • AMERICANA HOTEL • JAN. 17-20

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REDUCING the cost of your insurance

We will be glad to see you:

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Morris R. Eddy
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Clifford Branch
R. R. Ludwig
F. D. Powell
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Emil Werner
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"THE INDUSTRY'S OWN INSURANCE PLAN PROVIDING INSURANCE AT ACTUAL COST SINCE 1907"
"$34,000,000 IN SAVINGS REFUNDED TO POLICYHOLDERS"

Your insurance costs are as much a part of your overhead as any item of equipment, supplies or maintenance.

While at the convention, check with us on the advantages Canners Exchange can provide for your insurance program . . . proven, realistic reductions in cost . . . broad, comprehensive NON-ASSESSABLE policies . . . personalized safety protection and rate engineering services.

Our savings refunded to the industry have exceeded $34,000,000. If you haven't received your share . . . why wait?

Our 52nd Annual Report will be published shortly. We'll be glad to send you a copy.

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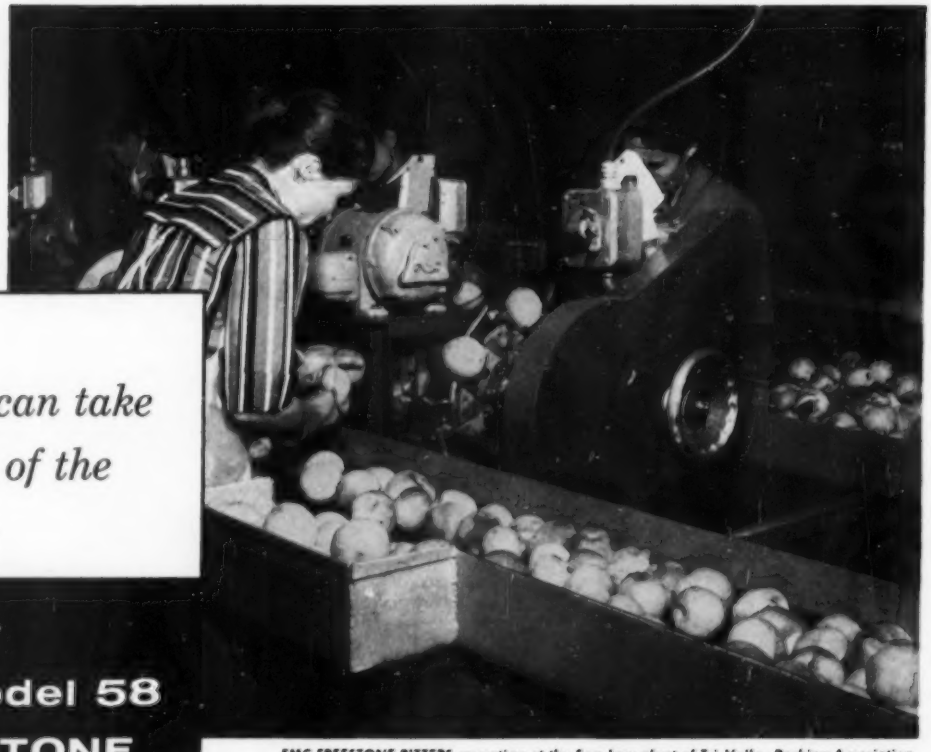
52 YEARS OF SPECIALIZED, DEPENDABLE INSURANCE

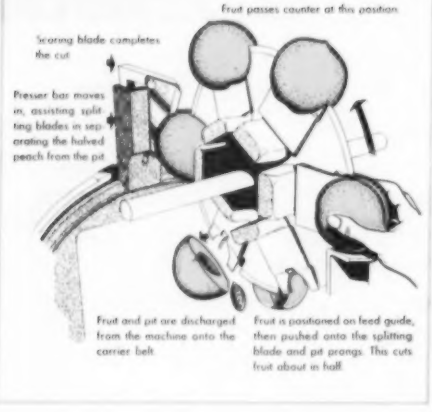


FMC FREESTONE PITTERS operating at the San Jose plant of Tri-Valley Packing Association.

Nothing can take the place of the

FMC Model 58 FREESTONE PITTER

. . . . for speed, simplicity and economy in freestone peach-pitting operations


Fruit passes counter at this position
Scoring blade completes the cut
Presser bar moves in, assisting splitting blades in separating the halved peach from the pit
Fruit and pit are discharged from the machine onto the carrier belt
Fruit is positioned on feed guide, then pushed onto the splitting blade and pit prongs. This cuts fruit about in half

Simply pre-set the splitting blades and flip the switch. The operator feeds this compact FMC Freestone Pitter and the machine does the rest, smoothly, uniformly – handling all sizes of freestone peaches without pre-grading.

In average operation you'll cleanly halve and pit up to 50 peaches a minute, with total separation of fruit from pit, no fragments left on the pit, and re-pitting cut to an absolute minimum.

Install it anywhere over any take-away conveyor system. It measures only 18" wide by 28" deep, and its small number of moving parts makes it really economical to maintain. Stainless steel knives are used, and a pair of water jets play on them to prevent build-up of fruit particles. Simple, open construction makes cleanup an easy matter.

Modern peach canning operations would find it hard to get along without the Model 58. Full information supplied gladly on request.

On exhibit at the 1960 Canners Convention, Booth No. 240

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION

Canning Machinery Division

General Sales Offices:

WESTERN: SAN JOSE, CALIF. • EASTERN: HOOPESTON, ILL.

"15% sales increase due largely to Knox-designed jar," says president of leading gourmet foods firm

The handsome fluted glass packages shown above were designed by Knox Glass, Inc. in 1957 for a leading Eastern manufacturer of gourmet foods.*

According to the firm's president:

"Sales increased nearly 15% after changing to the fluted jar which Knox Glass designed exclusively for us.

"The eye-catching salesmanship of the jar, which has no label other than the closure, permits the purchaser a clear, clean view of our appetizing products, such as Potato Salad, Cole Slaw, Macaroni Salad and Vegetable Chow Chow. Knox's strong design and the excellent quality of the glass we buy from Knox, combine to make this a wonderful package.

"We've been a Knox customer for nearly seven years and buy almost exclusively from them. Special quality products such as ours demand high quality glass and exceptional service. This we get from Knox."

Find out more about how Knox can meet your glass container needs — contact Knox Glass, Inc., Knox, Pennsylvania.

*Name available on request.

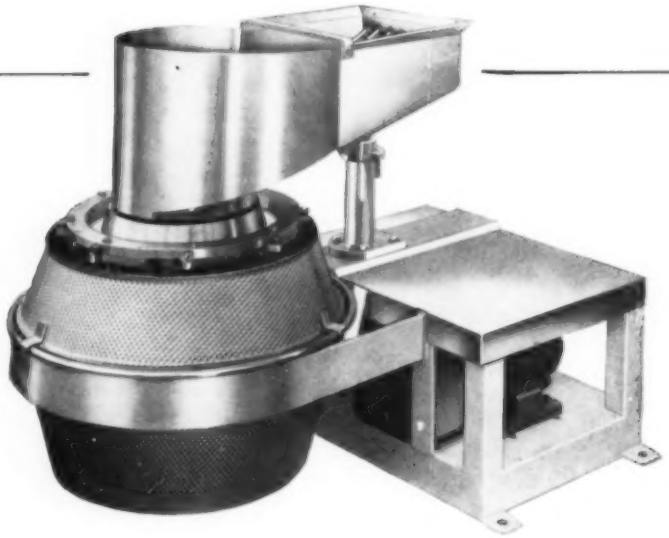
the new/**KNOX GLASS**

50 years of cutting progress

• OLDEST •
GOOSEBERRY SNIPPER
1910

newest

MODEL "CC" SLICER
1960



• In 1910, dad tucked his invention, the "little gem" Gooseberry Snipper, under his arm and set out to show a Chicago Pie Company how to get their 25 girls to quit stemming Gooseberries. That machine paid for itself the first day.

• Over the next fifty years, many more Urschel machines were developed to solve specific food packer cutting problems. These also quickly paid for themselves. Today, practically every type of packed food is precision cut on Urschel machines.

• Next time you're passing through, stop in and see our expanded research and manufacturing facilities. See what we're working on today to overcome your problems of tomorrow.

Joe Urschel

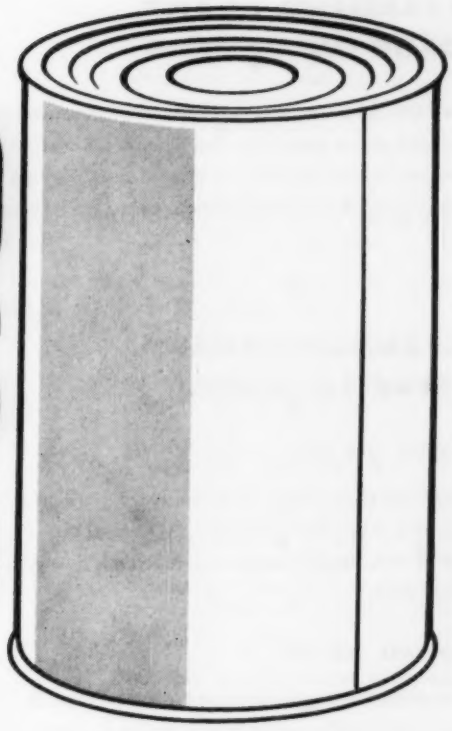
JOE URSCHEL
president

URSCHEL
LABORATORIES INC.
VALPARAISO, INDIANA

Designers and manufacturers of precision, high speed cutting equipment for food products.

Stop at Urschel Booth #202, Canner's National Convention, Miami Beach, January 18-20, 1960

150 YEARS YOUNG



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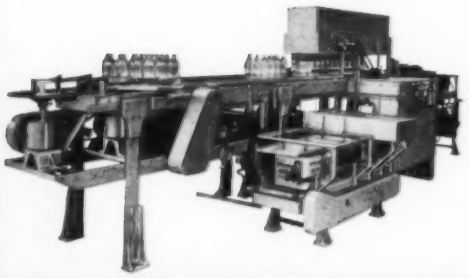
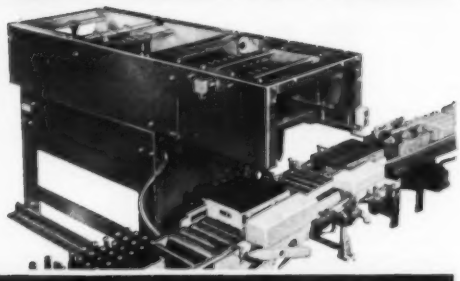


STANDARD-KNAPP CASE LOADERS

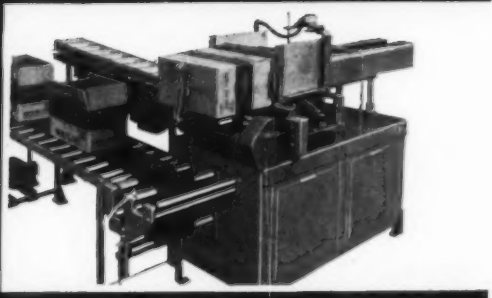
BOTTLE AND CAN

Type 860 Packer takes 27% less space, provides 40% more capacity than previous models. Cycles at speeds up to 30 cases per minute. Rapid change-over. Automatic or semi-automatic case feed.



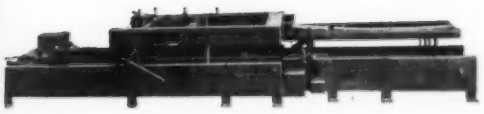
PACKAGE AND BAG

Mechanical and pneumatic types. Handle packages as soft as lb. bags of coffee, as weighty as 10 lbs. of sugar, as bulky as toilet tissue, as firm as detergent cartons, as small as soap.



STANDARD-KNAPP CASE GLUERS and SEALERS

Wide range of models, featuring quick positive adjustment to varying case sizes (some types have automatic adjustment), easily removed glue pots and rollers, accurate control of glue film by calibrated mechanism.



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SEE NEWEST PACKER LOAD PUMP-TYPE CANS

BOOTH 223

EMHART

Emhart Manufacturing Company
Portland, Connecticut
Standard-Knapp Packaging Equipment

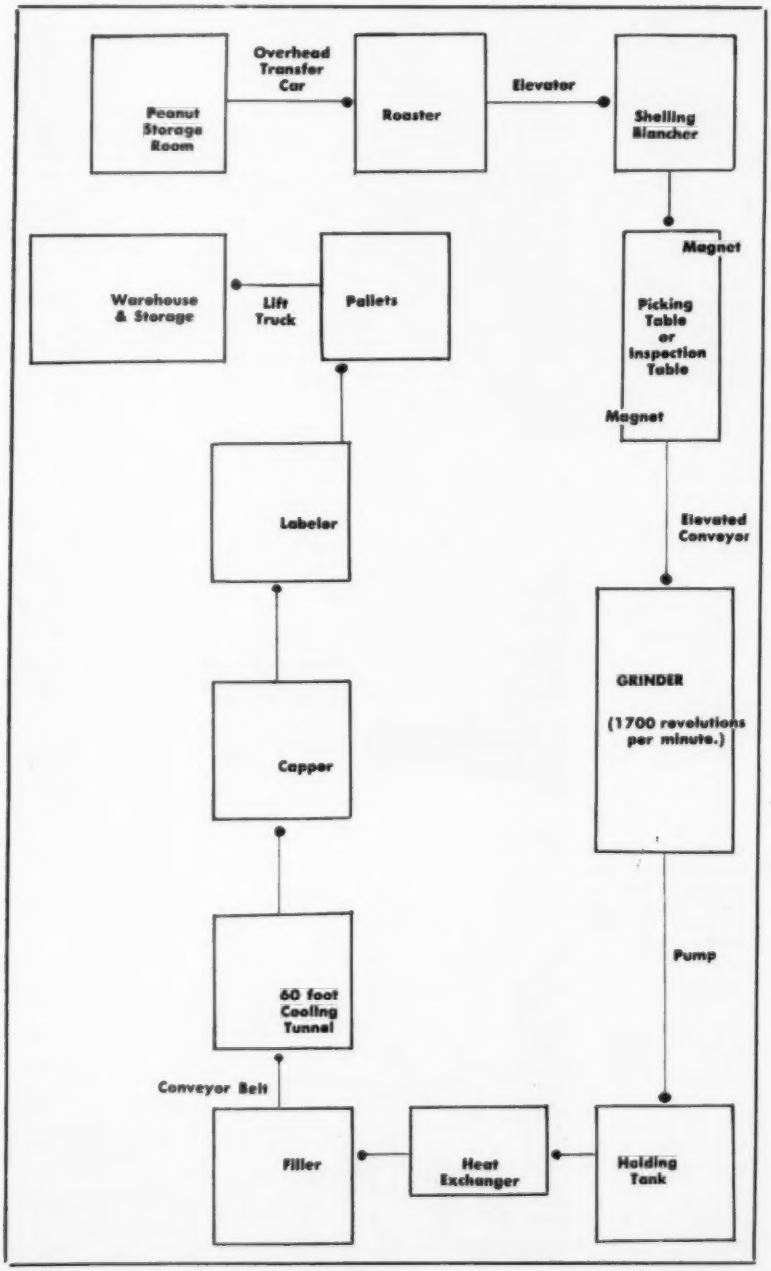
Rectangular Floorplan Aids Peanut Butter Efficiency

Machines and quality control also help boost Old Dutch volume over $1 million

By Robert G. Dyment

Old Dutch Foods, Inc., Blasdell, New York, processor of peanut butter and other food items, (mayonnaise, salad dressing, vegetable oil, fruit syrups) have increased the efficiency of its peanut butter operation and reduced labor costs by a compact, step-saving layout, coupled with modern and up-to-date equipment.

Also, a new research and quality control department, well equipped with scientific instruments, keeps a constant watch on peanut butter quality and is adding to the firm's success.



David Park, production manager and chief chemist, says:

"In order to save wasted labor and to increase efficiency, the peanut butter processing line has been placed in a square-type layout, covering approixmately 3,000 square feet within the plant interior.

"We have found that we obtain more efficient resul's from our employees by keeping our operation compact, but laid out in such a manner that one operation doesn't interfere with another. It's also easier to control the processing system by this square-type layout. Employees don't have far to walk from one unit to another and they themselves can keep watch on the progress of other departments which will, within a few minutes, effect their own operation."

The methods utilized by Old Dutch Foods, Inc. for peanut butter production, are shown in the accompanying flow sheet, and may be summarized as follows:

1. A 75 x 25 foot peanut storage room is located to one side of the processing operation. Peanuts arrive at the plant and are placed in this area, which will hold approximately 1000 bags of 100 lbs. each.

Operations Begin

2. From the storage room the raw peanuts are picked up by an overhead transfer car on a track. The car has a capacity of three bags and was built for Old Dutch Foods by Clarence Fulton, vice president and plant engineer.

3. The overhead unit moves the peanuts to a Bauer Bros. roaster, where they are dumped and roasted for 25 minutes. The transfer car is always kept filled during the processing operation to avoid loss of time between roastings.

4. From the roadster, a conveyor system takes the stock under a magnet, which catches any tramp metal. The peanuts then go by elevator to the shelling blancher, also a Bauer machine. Another magnet is found at the end of this unit, further to safeguard raw material quality.

5. The peanuts move to an inspec-

tion belt, where two employees cull out off-grade material. Magnetic bars at both ends of this table once again pick up tramp iron, while other unwanted material is removed by hand.

Butter Is Made

6. An elevated conveyor system, manufactured by Bauer, transports the peanuts to the grinder, which operates at 1700 revolutions per minute. At the time of grinding, salt, stabilizer and other ingredients are added.

7. After the grinding operation is completed, the peanut butter is pumped to a holding tank, with a capacity of 1200 lbs. This unit assures a steady flow of product to the operations which follow.

8. From the tank the peanut butter goes through a heat exchanger, which elevates it to the filling temperature of 140° F.

9. Jars are filled by means of a Filler Machine Co. unit, which is adjustable to the various sizes of containers used.

10. The product passes by conveyor to a cooling tunnel, a 60-foot installation which reduces the internal temperature to 85-90° F.

11. Closing of the jars follows, by means of White Cap Co. vapor-vacuum sealing equipment.

12. Labels are applied by Pneumatic Scale Corp. equipment, after which the jars are hand cased, and the cases sealed by E. W. Bliss Co. units.

13. The cases are palletized, and then moved by Clark lift trucks to the warehouse or the shipping platform.

Company Background

Old Dutch Foods was formed in the early 1930's by John Weigand and Edward Oberkircher. In 1945 Mr. Weigand bought up his partner's interest, and moved the plant from Buffalo, where it had been established, to Blasdell, N. Y. Two years ago Roswell Park purchased the business, and now heads it as president.

Associated with him are Clarence Fulton, vice-president and engineer, and David Park, production and quality control director.

The company currently produces peanut butter at the rate of 5,500 jars a day, and has a daily salad dressing capacity of 12,000 jars. Sales are made in eastern and midwestern states primarily, with some business also originating in Canada. Annual volume is now about $1,200,000, but officials expect it to grow in 1960.

"We have expansion plans, and plan to add a line of preserves and jams," reports Roswell Park. "We are busy studying equipment and markets, to determine what to pack and how to sell it. We expect to be running on a pilot plant basis early in 1960."

ROSWELL PARK, president, bought Old Dutch Foods two years back. He expects to be packing preserves in 1960.

DAVID PARK, production manager, uses a balance in his firm's laboratory, recently opened in Blasdell.

CLARENCE FULTON, vice president and engineer, points to jars of butter about to leave the Filler Machine unit.

There Is a Market in Europe For U.S. Frozen Foods

A freezing industry in its infancy needs technical help and a better supply

By Dr. Wilbur A. Gould

(Dr. Gould, technology editor of Canner/Packer, spend a month in Europe, recently. He represented the frozen food industry of the United States at the International Fine Food and Condiment Fair at Anuga, Koln, Germany and later presented a paper in a technical meeting at Verona, Italy. Commenting on his trip, Dr. Gould said, "If I had had an order book, I could have sold 600 tons of frozen foods."—Editor.)

The frozen food industry in Europe is developing rapidly. Particularly in Germany, frozen foods of high quality are being packaged in transparent film bags. There are still problems in distribution in Germany. Frozen food manufacturers speak of the "cold chain." The last link in the chain, the home freezer—even the home refrigerator—is still missing. The freezer cabinet for the retail store is a weak link but it is strengthening. Tyler Refrigeration Corp., a major supplier of frozen food cases in the United States, has opened a new plant in Germany.

While the lack of the home freezer would have been an impenetrable obstacle in the United States, it is a relatively unimportant factor in Germany.

The difference in Germany—and in Italy, France, Netherlands,—is the type of retail store and the buying habits of the public.

The retail stores are correctly referred to as shops. They are smaller, more intimately connected to the individual than were the corner groceries in the United States 20 years ago. In Germany, an apartment house may have a shop. If not, there is one next door. A small place, stocked with rows of packaged foods and bins of fresh vegetables—where the housewife buys provisions for a day or two days, but not for a week.

The end of the "cold chain" in Germany may well be the food shop. And this arrangement will provide an immediate supply of frozen food to a people who use food immediately.

DR. GOULD in the Anuga, Germany food exposition explains the merits of U.S. frozen foods.

In these same shops, canned foods have been familiar for years. The labels of Libby, McNeill and Libby, of California Packing Corp., Stokely Van-Camp, H. J. Heinz and others are found everywhere in Europe.

But canned foods have never reached the prominence that they have in the United States. The reason seems to be the relatively high cost of the container on the continent.

The frozen food industry has no similar restrictions.

In the short time of its existence, the frozen food industry in Germany has shown imaginative developments. Quality is first rate—and not by accident. The frozen food industry has adopted rules governing production and supply that insures quality on delivery.

Products too, show imagination.

Potato Balls—A mashed potato ball, highly seasoned is frozen and packaged in a film package. The German housewife drops the product into hot fat and a moment later has a tasty product that is equivalent to American french fried potatoes.

Frozen Berry Juices—Frozen blackberry juice and other berry juices are frozen in the film bags 1/2 in. thick and packaged between cardboard layers. The flavor is excellent and it is consumed with gusto in a country that drinks much of its fruit.

Baby Food—Frozen baby food is similarly packaged and sold. It is gaining a market in Germany, where in the U. S. it is used only experimentally.

Where Is the Market?

Two opportunities seem to exist for the frozen food manufacturer in the United States.

First, there is an excellent chance that the distribution and demand for frozen foods may exceed the domestic supply. Farmers are backward compared to the United States. Even in such regions as the Ruhr Valley in Germany and the Po Valley in Italy, mechanization is lacking. Ox carts are common. Tractors are rare.

Processing machinery is poor or lacking in Germany, a country that produces magnificent optics and precision instruments.

The state of food technology is low.

There is an unbelievable thirst for technical information on quality and production.

And farming in Europe, as anywhere, has good years and bad. Last year was a bad one for greens—in a country where spinach, mustard and other greens are staples.

Where Europe lacks a supply, U. S. firms could find a ready market.

Convenience Foods

A second possibility for U. S. processed food firms is the convenience foods. Even more than in the U. S., there is a need for labor saving in the kitchen. In Germany, many women work. They plan to buy what they need for feeding the family on the way home from the office or factory.

A frozen dinner, according to German buyers, would fit their needs. A price equivalent, to that found in U. S. supermarkets would be satisfactory.

While many of the German buyers are eager for a U. S. supply, there is little contact with the U. S. industry. The only representatives at the trade fair at Angua were members of the U. S. Department of Agriculture delegation. While the U. S. soybean, fish, fruit, poultry, rice, honey, and wheat industries were represented, processed foods were lacking—with at least the notable exception of the Florida Citrus Commission.

Frozen food has a chance for consumer acceptance in Europe that may exceed anything that has happened in the U. S. For the aggressive U. S. firm, it may be an important market of the future.

BLUEBERRIES in New England are a wild fruit, and when they are picked become mixed with leaves and stems and twigs. This winnowing machine is the first in a series of steps by Maine Canned Foods, Portland, in .....

Preparing Blueberries for Canning

Mechanical winnowers, air separators and water flotation are used, plus careful inspections by women employees

By KENNETH A. ANDERSEN

Blueberry canning at Maine Canned Foods, Portland, Me., is a constant battle against two major problems.

The first is that of attempting to introduce some of the advantages of cultivation into what is basically a wild raw material.

The second is that of successfully separating the fruit from all of the other materials which become mixed with it when it is harvested in its native habitat.

Growing The Crop

The berries are labeled "wild," and indeed they are, yet a good deal of field maintenance is needed if harvests are to be regular in quantity and satisfactory in quality. This cultivation work is carried on by the company on its own extensive land holdings, and also by contract growers on their acreage.

The important step here is burning over a field immediately after the harvest is concluded. Where a field is fairly level, this is accomplished by means of a tractor equipped with three flame-throwers. Where rocks crop up to make a typical New England pasture, straw is spread on the land to accelerate the burning.

Harvesting Is Next

Following the burning over, a field goes through the next season untouched, except some use of chemical herbicides to halt undesired growth of brush. In the second season the new crop appears, and then the packer and its growers must wrestle with the difficulties of picking. These are becoming of increasing consequence, according to Charles Bailey, who oversees both the Freedom and Union operations of his company.

"The Maine grower who was once content to run a small farm and to pick blueberries for cash is fast disappearing," he reports. "His wants now run to automobiles and TV sets, which require more cash and drive him to the towns for employment. Our hopes are centered in work presently going on to perfect mechanical picking equipment for our crops. It's been done for corn and beans; berries should be next.* We've learned to clean them, now we've only got to keep them rolling in."

Currently, the berries are harvested by hand, with the aid of wooden scoops equipped with steel prongs. The pickers not only scoop up blueberries, but a good deal of twigs and other unwanted material.

Cleaning Steps Follow

The preparation job, therefore, is principally one of separating the good fruit from all of the extraneous material which has gone into the picking baskets with it.

The first such step occurs in the field, where the baskets are discharged into winnowing machines—small powered units which pull off most of the sticks and other unwanted, and which

Half A Million

Despite occasional low prices, the problem of finding labor, and competition from the frozen product, canners still turn out a half million cases of blueberries a year, about as they did twenty years ago.

Blueberry Pack, actual cases:	
1940	332,000
1950	760,000
1958	561,000

allow the berries to drop into field boxes for the trip to the company's plants at Union and Freedom.

When the raw product passes over the receiving platform, the cleaning job continues. The next step is that of putting the fruit through air separators. Units similar to these have been used by Maine Canned Foods in separating splits and skins from dry beans for canned pork-and-bean packs at a third plant in Portland, and the principle has now been adapted to blueberries. The pneumatic equipment removes a large part of the remaining chaff, since twigs and berries are of unlike weights, and react differently to the air stream of the machines.

Destemming and Washing

This year, for the first time, Maine Canned Foods is employing Magnuson Stemouts—mechanical steam-removal units. The berries are delivered from the air separators, and the Magnuson equipment breaks up the clusters which add to the difficulties of handling, and eliminate the stems by catching them between parallel rubber-covered rods.

Now nearly clean, the fruit rolls into a washer, where it tumbles down a waterfall-like series of steps to a tank. Here the smaller berries sink to the bottom and are pumped up to a dewatering unit. The larger fruit, and what stems and twigs are still mixed with them, float to the surface. These are drained off and put through a second air separator, after which the two different sizes of berries are combined and pass through three more pneumatic separation machines.

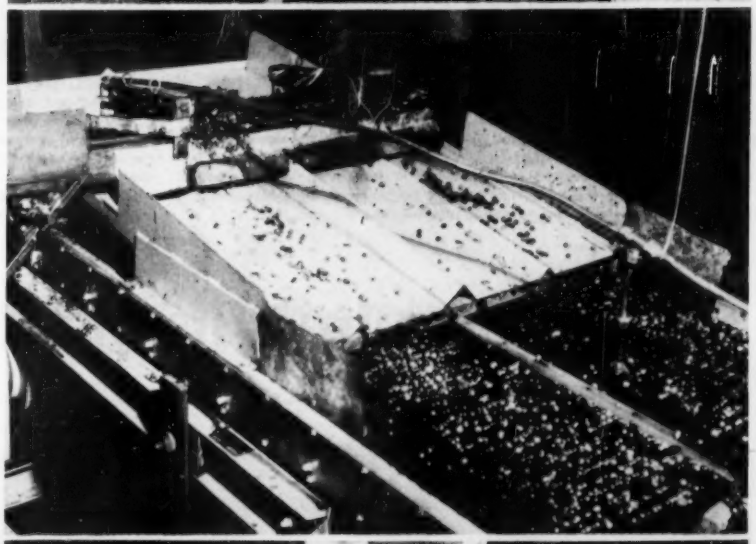
The final preparation step is a visual inspection, in which the raw material is passed over three inspection belts at which experienced workers eliminate berries of unsatisfactory quality, as well as any remaining foreign material.

Processing Steps

After this extensive preparation work, the processing steps are relatively simple. At the Freedom cannery, No. 10 cans only are packed, for the institutional and manufacturing trades. At Union, however, the output includes No. 2 tins for retail distribution, and a special small can put up for inclusion in a muffin-mix package by General Mills.

The muffin-mix fruit is packed in water, the No. 2's in syrup. All are then closed, and are cooked by retorting. The pack for General Mills has lithographed lids and requires no labeling. The other packs are stacked bright until shipping dates arrive, when they are labeled and cased in accordance with customers' instructions.

*Editor's note: See cover story in issue of September, 1959, re mechanical picker.



FIRST PREPARATION STEP at the plant is putting the berries through an air separator (top view). This equipment was adapted from dry bean cleaners.

NEXT COMES STEM REMOVAL, in an ingenious Magnuson Stemout, in which the stems are caught and removed by rubber-covered rollers (middle picture).

FLOTATION AND MORE AIR SEPARATIONS follow, after which the berries are given a thorough visual inspection and culling by women employees (third photograph).

HOT SPAGHETTI AND MEAT SAUCE, shown above, is one of 21 different frozen boil-in-the-bag entrees offered by Wilson & Co., Chicago, Ill., and packed at the firm's plant in Fairmont, Minn. Preparation time in the plant averages 20-30 minutes, and in about two hours more the frozen product is ready for shipping. In a restaurant or institution, the food can be preheated in less than five minutes in its Scotchpak film, whose edges remain cool enough for easy handling. See pictures for operating procedures.

1 SAUCE INGREDIENTS, meat and vegetables are separately prepared and cooked in individual kettles. Wilson & Co. packages a different entree about every other day. One day it may be chicken chow mein, and, two days later, welsh rarebit. Whatever the product, when the ingredients are ready, they are poured or scooped into stainless steel mixing kettles like this, where they are stirred together by cylindrical agitators until they are adequately blended together and ready for filling.

Seven Steps in Wilson's New Frozen Boil

PHOTOGRAPHS BY MINNESOTA MINING & MANUFACTURING CO.

4 SEALED ENTREES GO BY CONVEYOR to a weight-checking station, where over-under scales like the Exact Weight unit at left are employed for control purposes. The film's transparency enables the weighing employee to tell almost at a glance if the weight is accurate, according to A. E. Bernardin, production analyist in charge. Packages are then trayed up for freezing, at which time each package is pressed as flat as possible, to assure over-all freezing and uniformity of appearance.

5 AS EACH TRAY IS LOADED with bags of food, to a total of 18 packages, it is placed on a freezer rack and the latter is wheeled to the freezing chambers. Each pushcart holds up to 54 trays, yet ample space is allowed around the packages for necessary movement of air. Freezing is accomplished in chambers in which the air is reduced to —45° F. by ammonia compressors, and takes about 105 minutes. Sanitation and efficiency keep bacteria count "fantastically low," Wilson officials report.

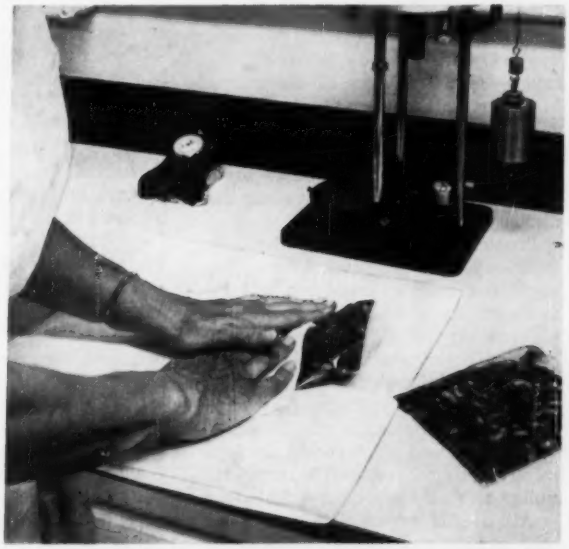
2 POLYESTER FILM BAG supplied by Minnesota Mining & Mfg. Co. is opened by a Trescott vacuum lifting device and suction head that grasps the thin film wall of the package, opens it and lifts it into the hands of the operator. She places it beneath one of three Burt Simplex filling machines, to which the product travels through stainless steel piping. Fillers discharge measured amounts of food—4½ to 7 oz.—and pause between "shots" just long enough for the operator to substitute an empty for the loaded bag.

3 HEAT-SEALING MACHINES, of the Pack Rite jaw type, are located next to the fillers in the packaging line. Filled bags travel to the sealers on rubber-covered conveyor belting. Package tops are flipped and folded to exclude excess air, and then are sealed at about 270° F. The sealing machines, resembling waffle irons, clamp their jaws against the film when triggered by the operator's foot pedal. Each package is sealed in seconds, yet the closure holds firm against both pressure and normal heat.

in Bag Packing

Mechanized packaging line and tray freezer produce more than half-million bags a month

6 AFTER FREEZING, entrees on trays are wheeled to another rubber-covered conveyor belt, where workers guide the packets into open cartons holding 12 servings each. The containers are then closed, and are transferred to refrigerated storage, where they are held in zero or below temperatures until shipment. Distribution to date is in the institutional field only, and Wilson has developed a portable heating unit for such firms with infra-equipment which reaches serving temperature in four minutes.



7 CAREFUL QUALITY CONTROL is an essential part of the Wilson operation. Three packages from each kettle-load undergo detailed checks in the test kitchen during the operation, to make sure that both product and package are up to standard. Packages undergo hand-squeezing and extreme boiling on the average of every 10 minutes, but with more than half a million units moving out of the plant every 30 days, Wilson Menu-Paks are reported as passing all of the tests "superlatively," according to Mr. Bernardin.

TRACTOR-DRAWN tomato harvester developed by Michigan State University performs three operations: cutting and picking up vines, separating tomatoes from vines and discharging tomatoes into boxes and vines to ground.

Tomatoes Are Picked By Experimental Machine

But mechanical harvest will bring radical changes in field practices

By Dennis H. Murphy
Managing Editor

The most successful test of machine picking of tomatoes in North America was in Ontario, Canada, last year. The experimental harvester developed by Michigan State College, traveling along at 1/2 mile per hour, cut the vines, dumped vines, tomatoes and all into a sort of shaker bed, and poured some 18 tons of Grade A fruit out along the discharge belt.

Problems? Lots of them, Michigan State engineers are frank to say. But none look even as serious as did the mechanical snap bean harvester during its early days.

The experimental machine of Michigan State University is one of four mechanical tomato pickers in various stages of development across the country. All of them are based on the idea of a one-time harvest. The vines are pulled up as the machine picks.

All of the experimental machines will require new tomato varieties to harvest. The machine must be able to shake the tomato free from the vine, a feat which is impossible with the tangled vine growth of most of the popular processing varieties. The few that do work well in machine harvest are the so-called "dwarf" or determinate varieties—normal size tomatoes on abbreviated vines.

Two tomato varieties tested by mechanical harvest have some of the characteristics needed. A dwarf tomato developed by Purdue University, which was due to be named in December and made available in limited quantities during the 1959 season, is known by its variety number, Purdue 58. The other is the C-52, the variety developed by R. J. Hall, G. S. C. Barnes and C. K. Kuypek of Libby, McNeill and Libby of Canada, Ltd.

Those New Varieties

The development of specific varieties for machine harvest may be a longer job, in the end, than the development of a machine that will gather them off the vine carefully and efficiently.

Not just a single variety is needed, but a whole platoon of them. Tomatoes used presently for processing have been bred for disease resistance, yield, resistance to "cracking" or splitting of the flesh near the stem during rapid growth. Processing tomatoes are classified according to several processing characteristics. Do they have the proper color, sufficient solids, high acidity, good flavor?

All these must be bred into the "blood" of the dwarf tomato plant. In addition it must meet these characteristics in varieties that will grow in nearly every state in the country.

And still more. The tomato for mechanical harvest will not only inherit all of the demands made on its predecessors, it will meet new and tougher ones from the machine itself. Since it will be harvested only once, instead of dragging along for weeks under the hand-picking regime, it must have all its tomatoes ripen at the same time—or as many as possible. And finally with tomatoes which ripen at once, the processor will need varieties with earlier and later ripening dates, in order to lengthen the peak production period.

Will Be Grown Differently

Once a satisfactory machine is developed and enough tomato varieties are on hand for a processor to venture into machine harvesting, the advantages mount up rapidly. The hazardous business of buying tomato plants in one area and shipping them in the spring for transplanting may be eliminated. Even with conventional picking, there are many processors who prefer direct seeding to transplanting. With machines and dwarf varieties, it appears that direct seeding would become standard.

The dwarf varieties, without the tangled vines, can be crowded closer together. A plant population of 10,000 to 15,000 per acre is estimated to be the most productive range, according to Purdue horticulturists. This is around twice as many plants as is common today.

Row spacing will be different. How different is still undetermined and the final answer must await a workable machine. Rows must be spaced to permit the operation of the picker. One test at Michigan State University indicated that double rows on five foot centers might be used.

Another technique showed some promise in Michigan State University experiments. Chemicals were applied to the plants to increase the concentration of fruit set. With more experience in timing and in the effects of various chemicals, this could become a standard practice in growing.

Handling Will Change

At harvest time, a stream of tomatoes will pour out of a discharge funnel, rather than pickers straggling in with a 30-lb. hamper of tomatoes. Handling techniques must change. The size of the picking box, whether a hamper or lug box, will probably need to be increased. Perhaps, guesses one Michigan State engineer, a shallow-bottom pallet bin would fit the need.

Once loaded, and hauled off to the factory, the processor would meet his biggest plant problem: Half the to-

matoes would be green. And one fourth of the ripe fruit might be broken. The answer to this sorting problem might include a quality grader, according to one Purdue estimate, that would separate the ripe fruit from the unripe according to density. But even with this mechanical help, hand sorting would need to be carefully done.

The presence of the green tomatoes would complicate still more an already complicated method of determining the price paid to growers.

Money Is Saved

But whatever the price to the grower, with machine harvest a cost saving seems a sure thing. The present machine can pick nearly one-fourth acre an hour. Then, assuming 12 tons of ripe tomatoes per acre, with a crew of four men, labor cost would be about $22.50 per acre. Machine plus tractor, $18. The total would equal $3.40 a ton for harvest of ripe fruit. This compares with $7.25 a ton now spent for harvest, or a saving of some $15 million a year.

More alluring than the saving of money, to some processors, is the possibility of ending their dependence on imported labor. Many packers who have been scanning the political horizons, feel that the supply of migrant workers and foreign nationals may disappear shortly.

However, a production model of a workable machine is still some time off. Next year will be another experimental year for the Michigan State machine. A new machine will be built this winter and tested indoors on green house grown tomatoes, before harvest time next year.

Eventually, if this machine is successful, an arrangement exists for it to be manufactured by Chisholm-Ryder of Niagara Falls, New York.

On a slightly different principle, is the machine built at Purdue University.

Two companies, Food Machinery and Chemical Corp., San Jose, Calif., and H. D. Hume Co. of Mendota, Ill. also report work on experimental tomato harvesters.

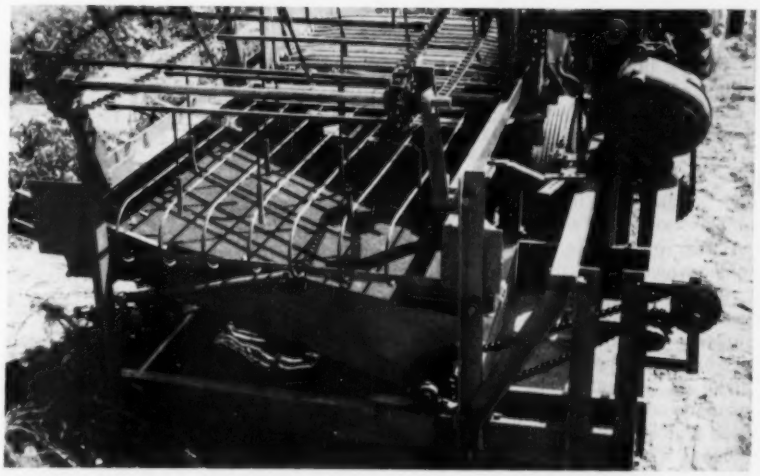
The development of the Michigan State University machine has been carried on by Dr. S. K. Ries and Dr. B. A. Stout. Prof. Ries is in the Horticulture Department and Prof. Stout in the Agriculture Engineering Department of the College of Agriculture, Michigan State University, East Lansing, Mich.

The work on dwarf varieties and mechanical harvesting has been carried on jointly by the Department of Horticulture and the Department of Botany and Plant Pathology, under the direction of Dr. E. C. Stevenson, head of the Department of Horticulture.

The experimental work on mechanical harvesting done by Food Machinery and Chemical Corp., has been supervised by Dr. Harold Link, Eastern Branch Manager, Hoopeston, Ill.

The work at the H. D. Hume Co., Mendota, Ill. has been carried on under E. L. Scheidenhelm, chief engineer.

SWEEPS DIG lightly into the ground to pick up loose tomatoes and to cut plant from the soil. Plants are held in place by metal fingers extending down from overhead chain. Elevator chain moves under the plants and carries them to separating device.



SEPARATING BED consists of several rods mounted in frame which shakes 175 to 200 times a minute in a four-inch stroke. Fruit are shaken off the plant and fall onto an inclined rubber belt. Dirt and trash move up the belt and are discharged at the top. Tomatoes roll down the belt onto conveyor.

ELEVATOR RAISES FRUIT to where it can be discharged into boxes on trailer. Overhead chain with extended fingers carries the plants to the rear of the shaker bed where they drop to the ground.

Dried Bean and Raisin Packers Look For Means of Improving Operations

Bean producers seek quicker cooking. Raisin industry studies dehydration.

Two branches of the U. S. dry food business—the nation's dried bean trade and the California raisin industry—currently are carrying on research to improve their future operations.

Bean packers are seeking a method by which their products can be improved. Raisin firms are looking for a new system for obtaining the quality they now offer.

Bean Technologists Meet

Some 60 representatives of the U. S. bean industry — from New York, Michigan, Idaho, California and elsewhere—met in November in Idaho to hear a progress report on research in their field. They learned that studies are going forward in two major lines: how to process dried beans so they can be prepared for the table more quickly, and how to meet the social problem of intestinal gas formation under which the business has labored.

Dr. John Nielsen, Stanford Research Institute, reported that he has been studying the breath composition of persons eating beans. Some of these individuals appeared to have more methane coming from their lungs after such a meal, but these were principally persons who were subject to constipation.

Dr. Floyd De Eds also has been working on the gaseous tendencies of beans, by studying the impact on rats. His research is still continuing.

Bean Preparation Improvement

Beans are now prepared for the table, in most instances, by being soaked overnight, and then by being simmered until adequately cooked. In this era of convenience foods, many housewives reportedly find this a tedious procedure, and this is also the opinion of many engaged in mass feeding operations.

The dry bean industry, therefore, is seeking a means of making its product ready for the table in a much briefer period of time. About a fourth of the total crop is now soaked and canned by commercial packers, but an improved method of preparing the uncanned dry merchandise is also being sought.

At Idaho it was reported that various agencies are working on this project—the U. S. Army Quarter Master Corps, New York Experiment Station, U. S. Dept. of Agriculture (at Albany and Pasadena, Calif.), and Stanford Research Institute.

Dehydration versus Sun

The California raisin industry is investigating the possibilities of turning grapes into raisins by mechanical dehydration, instead of by tray-drying in the sun, as the pack is now produced (except for the small tonnage of golden and sulfur types).

The state's San Joaquin Valley annually produces a third or more of the total world pack of raisins and dried currants. Its dominant position is due to the quality of its Thompson seedless grapes, and to the fact that September (when drying is at its peak) is practically rain-free in the valley.

About one year out of every seven or eight, however, enough rain falls to do some small damage in September . . there is more rainfall in October, when some fruit is still on the trays . . and once every 15 years or so there is a really bad streak of murky weather in September which causes a major loss in the crop.

If the fruit were dried mechanically in gas-fired tunnels, instead of being exposed to the weather, almost all of the rain problems would be eliminated. In 1958, when the industry had a streak of bad weather at the wrong time, this might have saved upwards of 50,000 tons of raisins out of a total crop of 200,000 tons.

Raisins Are Not Prunes

The Pacific Coast prune industry, which once depended on the sun to dry its crop, now produces almost its entire pack by mechanical dehydration, in forced-draft, gas-heated tunnels. But prunes are semi-dried when picked, grapes are not . . prunes are dark-skinned to start, grapes are not . . prunes stand up well under heat, whereas grapes tend to carbonize at about 155° F., and hence have to be given a long and slow dry or they bleed (i.e., become sticky). Prunes, finally, have to be moved somewhere from the orchards when picked—either to a dry-yard or a dehydration plant—whereas grapes today are sun-dried beside the vines.

Nevertheless, the raisin business is carefully studying the possibilities of dehydration. Some of the pack already is produced this way: the very small pack of soda-dipped Thompsons, and the much larger pack of golden seedless (Thompsons dehydrated after being treated with sulfur).

In addition, a research project has been carried on this past season at Fresno State College, under sponsorship of Calif. Raisin Advisory Board (the agency administering the federal raisin marketing order). Utilizing California fruit dehydration tunnels, the college technologists have run a variety of tests in an effort to speed up the process, thus cutting down on the number of tunnels which would be required to handle the crop. One reportedly-interesting development has been trial of a two-stage process (fruit operations are now all single-stage), in which grapes are subjected to 200° F. in the first tunnel, and are finished in a second at 160° F. or below.

Big Expense Involved

Thirdly, individual experiments are being conducted by firms engaged in making dehydration equipment, and by individual grape growers and raisin packers. Such possibilities as infra-red drying, heating tunnels by the sun's rays, etc., are being discussed.

If present-style tunnels were to be adopted for the industry, their capacity would be about a ton of raisins per day for a 50-day harvesting season, and thus some 3,000 tunnels would be needed to turn out 150,000 tons of fruit, the minimum produced in recent years. Each tunnel, with its heating and dipping equipment, would cost upwards of $10,000, which would mean a total investment of $30 millions. Although grower cooperatives might be formed to build and operate these in batteries of eight or more, as is now done with prunes, this would be a heavy financial burden to the industry.

Meanwhile, other efforts are being made to improve the present sun-drying method. Foil is being tested as a replacement for the present paper trays used, because of its ability to reflect heat, and perhaps to be used again and again. Transparent plastic hoods have been tried over the trays, to shed rain. Some growers also talk of training the vines to bear grapes on branches reaching out to the sides, so as to reduce labor at harvest and drying time.

Whatever direction these research projects finally take, both the dried fruit and dried vegetable industries of the country are actively seeking to improve their products for the benefit of retail consumers and of remanufacturers.

optimism of canners promises a challenging and exciting convention

By THE EDITORS

It looks as if it will be an interesting convention.

Not just because of warm sun and the tempting swimming pools in the Miami Beach hotels, where the National Canners Association will hold its 53rd annual convention, beginning January 18.

And not because this year, as every year, the convention program includes a number of speakers and a number of panels with important and timely subjects to discuss.

This year will be one of the really exciting conventions, we feel, because so many things have happened in 1959 that are of concern to all canners. There are problems and developments that must be considered and argued by canners as an association, rather than as individuals.

Field Crops

Field crops will be high on the list. New developments and new problems seem to have arrived monthly over the past year.

The trend to field mechanization seems to be moving more rapidly than ever. There have been reports of machines taking over more hand work in cherries, peas and grapes. And even the days of picking tomatoes by hand seem to be numbered. A few years ago, when corn pickers took over in the sweet corn fields, there were some hopes for machinery for other crops—but not tomatoes. And yet, as is reported elsewhere in this issue, a tomato harvester that works is already on the way.

And with this success, the plans for mechanical asparagus harvesters may be dusted off again. And the contrivances for removing stems and caps from strawberries may be perfected where they can work efficiently in more than a few selected varieties.

These things are important, field crops men say. They are important today, and in five years they may be vital.

Agricultural labor appears to be headed for a spot as a political issue in the 1960 elections. Labor policies have been debated with various degrees of competency, and with various degrees of candor, during the past months.

Labor Is an Issue

This seems to spell difficulty, red tape and governmental pressure in the coming years. And it seems to underline the importance of trading machines for manual labor as soon as possible.

These are things that will be of concern to the National Canners Assn., committee on Raw Products. It will be the subject of comments by speakers during the technical sessions. And, as are all important topics, these will be discussed and discussed in hallways and rooms, over coffees and martinis.

- There are red-eyed flies that were particularly troublesome this year.
- There are new varieties: earlier apples, peaches that promise canning crops for the mid-West and South, corn that fits the cutter better. There are improved beets on the way, better carrots. There is talk of progress in growing Blue Lake beans on a bush.
- And there is, of course, this business with the cranberries.

More Government

And the cranberry problem is a tough one that will probably be wrestled with in meetings of the Research committee, and will be fought through during the sessions on quality control, and will be beaten once more by the Legislative committee. It will be an issue in the informal question sessions.

With this problem of unintentional ingredients will come the prospects of the new exclusive list of ingredients that are safe to use, according to the Food and Drug Administration.

Quality control has long been a byword of canners. It may now become a pass word. The every-day techniques will be explored by Bruno A. Filice, food technologist in charge of quality control for Filice and Perrelli Canning Co., Richmond Calif.

150 Years of Metal Cans

Finally, there will be a new touch of spice at the 1960 convention, since it is the 150th anniversary of the development of the metal can.

In 1810, Nicholas Appert's invention was officially accepted by the French government.

The officers and executives of the National Canners Assn. and the Can Manufacturers Institute have decided to remember the birthday. "Rather than blowing out birthday candles," Norman Sorenseon, NCA president said, "I like to think we can light a few new ones."

Schedule of Events at Miami Beach, January 16-20

Saturday, January 16

8:30 a.m.—N.C.A. Research Committee, Breakfast Meeting, Barbados Room, Americana Hotel.
8:30 a.m.—N.C.A. Consumer Service Committee, Breakfast Meeting, Bermuda Room, Americana Hotel.
10 a.m.—C.M.&S.A. Board of Directors, Meeting, Bimini Room, Americana Hotel.
12:30 p.m.—Administrative Council, Luncheon Meeting, Pan American Room, Americana Hotel.
4:30 p.m.—Forty-Niners, Annual Meeting, Argyle Room, Balmoral Hotel.
5 p.m.—Forty-Niners Award Ceremony and Reception, King's Terrace, Balmoral Hotel.
7 p.m.—State Secretaries Dinner, Pan American Room, Americana Hotel.

Sunday, January 17

8 a.m.—N.C.A. Claims Committee, Breakfast Meeting, Bimini Room, Americana Hotel.
8 a.m.—N.C.A. Legislative Committee, Breakfast Meeting, Barbados Room, Americana Hotel.
8 a.m.—N.C.A. Consumer and Trade Relations Committee, Breakfast Meeting, Bermuda Room, Americana Hotel.
8 a.m.—Cooperative Processors Association, Breakfast Meeting, Argyle Room, Balmoral Hotel.
10 a.m.—C.M.&S.A. Annual Meeting, Westward Room, Americana Hotel.
10 a.m.—N.C.A. Board of Directors, Executive Session, Floridian Room, Americana Hotel.
12 p.m.-4 p.m.—The Canners Show, Exhibition Halls, Americana Hotel.
12:30 p.m.—N.C.A. Board of Directors and Food Editors Luncheon, Medallion Room, Americana Hotel.
2 p.m.—N.C.A. Board of Directors, Executive Session (resumed), Floridian Room, Americana Hotel.
2 p.m.—Food Editors Conference, Medallion Room, Americana Hotel.
6 p.m.—Old Guard Cocktail Party, Starlight Terrace, Americana Hotel.
7:45 p.m.—Old Guard Banquet, Bal Masque, Medallion Room, Americana Hotel.
8 p.m.—N.C.A. Research Smoker, Bragadoon Room, Balmoral Hotel.

Monday, January 18

7:30 a.m.—Processed Apples Institute, Breakfast Meeting, Bimini Room, Americana Hotel.
8 a.m.—N.C.A. Fishery Products Committee, Breakfast Meeting, Pan American Room, Americana Hotel.
9 a.m.—N.C.A. Nominating Committee, Caribbean Suite, Americana Hotel.
10 a.m.—N.C.A. Annual Meeting, Bal Masque-Medallion Room, Americana Hotel.
10 a.m.-4 p.m.—The Canners Show, Exhibition Halls, Americana Hotel.
12:30 p.m. — N.C.A. Procurement Committee, Luncheon Meeting, Bermuda Room, Americana Hotel.
12:30 p.m.—N.C.A. Raw Products Research Committee, Luncheon Meeting, Westward Room, Americana Hotel.
12:30 p.m.—N.C.A. Statistics Committee, Luncheon Meeting, Floridian Room, Americana Hotel.
2 p.m.—N.C.A. Equipment Sanitation Committee, Meeting, Brigadoon Room, Balmoral Hotel.
2:30 p.m.—C.M.&S.A. Ladies Day Program, Bal Masque, Americana Hotel.
7:45 p.m.—C.M.&S.A. Dinner Dance, Napoleon Room, Deauville Hotel.

Tuesday, January 19

8:30 a.m.—N.C.A. Research and Technical Session (breakfast), Bal Masque Room, Americana Hotel.
8:30 a.m.—N.C.A. Raw Products Session (breakfast), Medallion Room, Americana Hotel.
8:30 a.m.—N.C.A. Marketing Session (breakfast) Carribbean Suite, Americana Hotel.
8:30 a.m.—N.C.A. Fishery Products Session (breakfast), Pan American Room, Americana Hotel.
10 a.m.-4 p.m.—The Canners Show, Exhibition Halls, Americana Hotel.
2 p.m.—N.C.A. Statistical Quality Control Workshop, Floridian Room, Americana Hotel.
7:30 p.m.—Young Guard Banquet, Carillon Hotel.

Wednesday, January 20

8:30 a.m.—N.C.A. Research and Technical Session (breakfast), Bal Masque Room, Americana Hotel.
8:30 a.m.—Raw Products Session (breakfast), Medallion Room, Americana Hotel.
10 a.m.-4 p.m.—The Canners Show, Exhibition Halls, Americana Hotel.

National Canners Assn. Convention Schedule

Sunday, January 17

12:30 p.m.—Joint Luncheon, Board of Directors, Administrative Council, Food Editors, and Invited Guests.
Presiding: Norman Sorensen, President, N.C.A. Sesquicentennial Observance — the 150th Anniversary of Canning and the Tin Can.
Presentation of 150th Birthday Cake —Mr. Sorensen and Roger F. Hepenstal, President, Can Manufacturers Institute.
Address: Charles B. Shuman, President, American Farm Bureau Federation.

2:30 p.m.—Food Editors Conference.
Presiding: Louis Ratzesberger, Jr., Chairman, N.C.A. Consumer and Trade Relations Committee.
Presentation of Press Kits on Sesquicentennial Color Slide Presentation, "Red Letter Days."

Monday, January 18

9 a.m.—Annual Meeting
Presiding: Norman Sorensen, President, National Canners Association.
Invocation: Midlan D. Smith, Vice President, National Canners Association.
Greetings: President Sorensen.
Report of the Nominating Committee: A. Edward Brown, Chairman.
Election of Officers.
Report of the Resolutions Committee: William U. Hudson, Chairman.
Presentation of 150th Anniversary Plaques: Norman Sorensen, President, N.C.A. Roger F. Hepenstal, President, Can Manufacturers Institute. W. D. Lewis, Secretary-Treasurer, Canning Machinery and Supplies Association.
Address: Roger M. Blough, Chairman of the Board, United States Steel Corp., Pittsburgh.

Tuesday, January 19

8:30 a.m.—Scientific Research Technical Session.
Breakfast Meeting (breakfast tickets $3.50 each)
Presiding: C. L. Rumberger, Chairman, N.C.A. Scientific Research Committee.
Address: "What the Consumer Expects in the Quality of Canned Foods"—Mrs. Agnes R. Olmstead, Director of Home Economics, Colonial Stores, Inc., Atlanta.
Address: "Quality Control Techniques Available to the Average Canner"—Bruno A. Filice, Filice and Perrelli Canning Company, Richmond, Calif.
Address: "Quality Protection with Statistical Quality Control"—Ian MacPhail, H. J. Heinz Company, Pittsburgh.
Address: "Future Opportunities for the Increased Use of Radioactive Materials in Food Quality Control Technology"—Dr. John H. Rust, Head, Section on Nuclear Medicine, School of Medicine, University of Chicago.

8:30 a.m.—Raw Products Problems Clinic.
Breakfast Meeting (breakfast tickets $3.50 each)
"Vegetable Crops for Processing"
Moderator: Dr. C. H. Mahoney, Director, N.C.A. Raw Products Research Bureau.
An open panel discussion, among industry members representing different geographic regions, of industry-wide basic problems in the production of tomatoes, peas, snap beans, corn, and other vegetable crops.

8:30 a.m.—Marketing Session.
Breakfast Meeting (breakfast tickets $3.50 each)
Presiding: Norman Sorensen, President, N.C.A.
Address: "Enforcement Policies of the Federal Trade Commission in the Canning Industry"—Earl W. Kintner, Chairman, Federal Trade Commission.
Address: "Current Interpretations by the FTC and the Courts—Their Implications for Canners" —H. Thomas Austern, Chief Counsel, N.C.A.

8:30 a.m.—Fishery Products Session.
Breakfast Meeting (breakfast tickets $3.50 each)
Presiding: Haakon Friele, Chairman, N.C.A. Fishery Products Committee.
Address: "Law of the Sea" — (speaker to be announced).

2 p.m.—Statistical Quality Control Workshop.
Presiding: Dr. Howard L. Stier, Director, N.C.A. Division of Statistics.
Panelists: Bruno A. Filice, Filice and Perrelli Canning Company, Richmond, Calif., and Ian MacPhail, H. J. Heinz Company, Pittsburgh, and members of the staff of the N.C.A. Research Laboratories.

Wednesday, January 20

8:30 a.m.—Canned Foods Problems Clinic.
Breakfast Meeting (breakfast tickets $3.50 each)
Presiding: Dr. Ira I. Somers, Director, N.C.A. Research Laboratories.
A panel of experts from the N.C.A. Research Laboratories and the container companies will discuss problems encountered in the industry during the past year and will be prepared to answer questions from the floor.

8:30 a.m.—Raw Products Problems Clinic.
Breakfast Meeting (breakfast tickets $3.50 each)
"Fruit Crops for Processing"
Moderator: Dr. Edwin A. Crosby, Assistant Director, N.C.A. Raw Products Research Bureau.
An open panel discussion, among inferent geographic regions, of industry members representing difdustry-wide basic problems in the production of peaches, pears, sour cherries, apples, and other fruit crops.

8 a.m.—Marketing Session.
Breakfast Meeting (breakfast tickets $3.50 each)
Presiding: Milan D. Smith, Vice President, N.C.A.
Address: "Food Consumption Trends—Their Significance to the Canning Industry" — James P. Cavin, Agricultural Marketing Serivce, U. S. Department of Agriculture.
Address: "Gearing Canned Foods Production and Sales to the Food Retailing Revolution" — Robert Mueller, Editor, Progressive Grocer.

Firms Exhibiting

Booth Number	
101	The Heekin Can Company
102	The Pfaudler Co.
103	Continental Can Co.
104	Hazel-Atlas Glass Division
105	White Cap Company
106	Boxboard & Folding Carton Div.
107	The Max Ams Machine Co.
109	Diamond Crystal Salt Company
110	Corneli Seed Co.
111	Aluminum Company of America
112	Rogers Bros. Seed Co., Inc.
113	Crites-Moscow Growers, Inc.
114	Crompton & Knowles Pkg. Corp.
115	Pure Line Seeds, Inc.
116	Minneapolis-Honeywell Reg. Co.
117	The Griffith Laboratories
119	Canners Exchange
120	Audubon Wire Cloth Corp.
121	Dewey & Almy Chemical Co.
121A	Knox Glass Inc.
122	The Sinclair-Scott Co.
123	Armstrong Cork Company
125	E. I. Du Pont de Nemours & Co., Inc.
126	Baldwin-Lima-Hamilton Corp.
127	Keystone Lubricating Co.
128	Scientific Oil Compounding Co.
129	Anchor Hocking Glass Corp.
130	Canner/Packer
131	Canning Trade
132	Gallatin Valley Seed Company
133	Waukesha Foundry Co.
134	National Can Corporation
135	Ferry-Morse Seed Co.
136	Brooks Chemicals Inc.
137	Metro Glass Co., Inc.
138	Wm. J. Stange Co.
139	The W. J. Fitzpatrick Co.
140	Thatcher Glass Mfg. Co., Inc.
141	Kieckhefer-Eddy Division
142	Michael-Leonard Co.
143	Asgrow Seed Co.
144	Shuttleworth Machinery Corp.
145	The Crown Cork & Seal Co., Inc.
146	Sunkist Growers
147	The Malayan Tin Bureau
148	Brockway Glass Co., Inc.
149	Dodge & Olcott, Inc.
150	Mojonnier Bros. Co.
151	Corn Products Sales Co.
152	Washburn Wilson Seed Co.
154	Ball Brothers Company
155	CESCO
157	Owens-Illinois Glass Co.
158	U. S. Steel Corporation
159	American Can Company
160	George J. Olney, Inc.
161	C. I. T. Corporation
162	Rietz Manufacturing Co.
163	Mead Containers
164	Northrup, King & Co.
165	Milwaukee Motive Mfg. Co.
166	Diagraph-Bradley Industries, Inc.
201	A. K. Robins & Co., Inc.
202	Urschel Laboratories, Inc.
203	Robbins & Myers, Inc.
204	E. W. Bliss Company
205	Karl Kiefer Machine Company
206	Berlin Chapman Co.
207	A. P. V. Company, Inc.
208	Frank Hamachek Machine Co.
210	F. H. Langenskamp Company
211	The Barker Company
212	The Scott Viner Co.
213	Chisholm-Ryder Co., Inc.—NY Chisholm-Ryder Co. of Pa.
214	U. S. Bottlers Machinery Co.
215	Economic Machinery Company
216	Cherry-Burrell Corp.
218	Burt Machine Company
219	Angelus Sanitary Can Machine Co.
220	New Jersey Machine Corp.
223	Emhart Manufacturing Co.
224	International Salt Co., Inc.
226	Ace Specialty Mfg. Company
227	Electric Sorting Machine Co.
228	R. A. Jones & Co., Inc.
229	Horix Mfg. Company
230	W. A. Rice Seed Co.
231	Groen Mfg. Company
232	Sellers Injector Corp.
233	The Creamery Package Mfg. Co.
234	Link-Belt Company
235	Girdler Process Equipment Div.
236	General Food Equipment Inc., Dixie Way Mach. Div.
237	A-B-C Packaging Machine Corp.
238	Ladish Co. - Tri-clover Div.
239	Taylor Instrument Companies
240	Food Machinery & Chemical Corp.
241	Algene Marking Equipment Co.

Americana Hotel

First floor:

Exhibit in Machinery Hall.

Second floor:

Exhibit in Grand Ballroom.

More Mechanical, More Control

Even seeds and syrups get more specialized among new items at the Canners Show

Trends in machinery and equipment in the canning industry are the same as in every industry—only in some cases they are more so.

The list of new and improved products turned in by manufacturers show the trends of automation, of machines replacing manpower, of more versatility, more precision.

Sanitation and safety features are getting a big play. Supplies from seeds to seasoning are tailored to meet specific jobs. These have all been trends of the past and they are continuing.

This year, in the big Americana Hotel in Miami Beach, there will be a few differences. The exhibits will be more concentrated than in past years. Exhibit space is limited. Some of the heavy equipment has been left home and photos, movies, spec sheets substituted.

But as usual, the exhibits will be easily accessible. The convention exhibit will occupy the entire ballroom and machinery hall in the Americana Hotel. The exhibits will be accessible from the hotel's lobby and cabana-pool area.

The Canners Show will open at noon Sunday, January 17, and close at 4 p.m. It will be open daily, Monday through Wednesday, from 10 a.m. to 4 p.m.

Exhibitors **Booth**

A-B-C Packaging Machine Corp. **237**
Exhibit: Automatic top and bottom case sealer.
Personnel: Omer A. Rupp, A. G. Watkins.

A.P.V. Company, Inc. **207**

Ace Specialty Mfg. Co. **226**
Exhibit: Automatic can ejector.
Personnel: Karl R. Anderson, Blaine Bender.

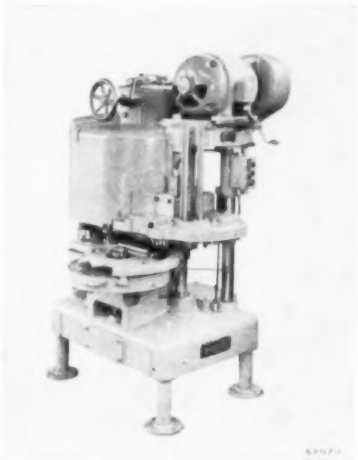
Algene Marking Equipment Co. **241**
Exhibit: Flat Box printers, multiple printers, roller printers, spot coders, continuous coders, conveyor markers.
Personnel: Milton Mann, Mac Amin.

Aluminum Company of America **111**
Exhibit: Motion picture on closures. New catsup cap; aluminum cans; baby food caps.
Personnel: H. J. Endean, L. G. Van Vilet, J. E. Hileman, A. Osborn, M. Crall, A. R. McNitt, D. H. Thompson, J. J. Flannery, R. A. Kuhn, F. Wagner, B. Barstow, R. C. Squires, C. Sands and P. C. Althen.

American Can Co. **159**
Exhibit: A message center will be provided for use of all canners attending the convention.

Max Ams Machine Co. **107**

Anchor Hocking Glass Corp. **129**
Exhibit: Anchor glass containers; Anchor metal, screw, twist, lug, vacuum closures and Anchor molded caps.
Personnel: Headquarters and district sales managers, package engineering and research, advertising and sales promotion personnel.



ANGELUS SEAMER, Model 60L has been adopted as a standard seamer for high speed can lines by can makers. The machine will be equipped with several improvements including worm-type can feed.

Angelus Sanitary Can Machine Co. **219**
Exhibit: High speed can manufacturing seamer.
Personnel: E. O. Lowell, G. G. Koeberle, R. V. Potter, W. B. Peterson, Otto Heck, J. P. Battaglia.

Armstrong Cork Co. **123**
Exhibit: Filmed food industry promotion commercials will be shown. Also promotion aids for supermarket sales and sample containers will be shown.
Personnel: R. M. Ulmer, R. C. Langsett, B. M. Humphries.

Asgrow Seed Co. **143**
Exhibit: Meeting place for discussing seed developments and requirements.
Personnel: George R. Beecher, Merritt Clark, W. F. Hargrave, Carl E. Hohlt, Leon Ridgway, Dr. Floyd L. Winter.

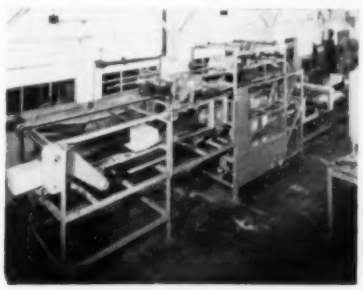
Atkron, Inc. **215**
Exhibit: Automatic equipment for case packing and uncasing, and can sorting.

Audubon Wire Cloth Corp. **120**
Exhibit: Metalwove flexible conveyor belts.
Personnel: James G. McGinnis, C. A. Heller, James Bean, William M. Hawkins, Lee F. Grunkemeyer, P. A. Rand, S. A. Wright.

Baldwin-Lima-Hamilton Corp. **126**

Ball Brothers Company, Inc. **154**
Exhibit: Glass containers and metal closures. Colored trans-lights illustrating steps taken to assure production of quality products.
Personnel: J. E. Bellinger, K. M. Hay, V. C. Schranz, S. R. Bowman, R. G. Madill, L. V. Parry, W. C. Hannah.

Barker Company **211**



NEW CASE PACKER with bottom loading principal, raising containers gently up into case, will be featured (not displayed) by W. F. and John Barnes Co.

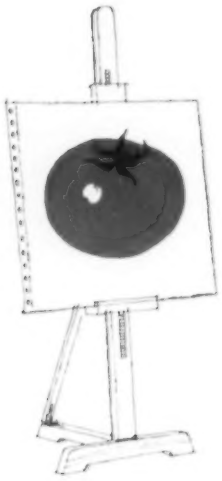
Barnes Co., W. F. & John **225**
Exhibit: No machinery will be displayed but photos and specs will be featured of bottom-loading case packer, single filer, can end curler, retort basket loaders and unloaders.
Personnel: C. J. Smith, W. M. Parry, Chas. Wiers.

Berlin Chapman Co. **206**
Personnel: John B. Gillett, W. T. Howeth, Dwight Landreth, Roy C. Duncan.

E. W. Bliss Co. **204**
Exhibit: A number 1103 scroll shear. Photos of other equipment will be shown.
Personnel: R. Potter, A. S. Burgoyne, S. E. Huffman, B. E. Meyer, F. B. Porteous, G. T. Pfifer, D. J. Lundstrom, E. V. Ferry, W. St. Lawrence, P. F. Meinecke, R. F. McCaffrey, L. R. Crary.

Brockway Glass Co., Inc. **148**
Exhibit: Glass containers for foods, etc.
Personnel: A. G. Blentz, W. A. Sones, A. S. Reese, D. A. Youngdahl, A. L. Gavazzi, R. M. Kirkpatrick.

Brooks Chemicals, Inc. **136**
Exhibit: Lagoon order control agents, and a new line of sulfamic acid cleaners specially developed for cleaning food processing equipment.
Personnel: Wm. J. Divito, Wm. P. Koenig, G. D. Lancaster.



Portrait of an industry, 1960

...a case in which there can't be any doubt that "one picture is worth a thousand words"

It's not often that a simple photograph can tell as much as the one at the right!

Here, just a click of the color camera has produced *a highly informative panorama of the packaging situation of an entire industry.*

This is the perfect picture of catsup packaging as of 1960 . . . the story of the march of the catsup brands into the Vapor-Vacuum "Twist-Off" camp. Here is a brand-by-brand report of the change-over which now finds the great majority of catsup brands using the ¼-turn catsup cap. (Hundreds of other brands, too numerous to picture, use it, too.)

Via 3-fold logic

The explanation for this mass movement—three unmistakable facts:

1—Public preference. People like the ¼-turn action. Opening or closing, it's a pleasure, not a chore.

2—Merchandising advantage. Perhaps the greatest force behind the change-over is the insistence of merchandisers. Closest to the public pulse, the merchandisers seldom miss a chance to ride with the tide. So they specify Vapor-Vacuum "Twist-Off" capped catsup.

3—Packaging efficiency. The packer's needs for both economy and safety make the "Twist-Off" his best buy. On the line, they hold costs down. In the warehouse, they provide surest protection.

Combine these advantages with the "Twist-Off's" superior beauty, and it's clear that the rapid sweep of the ¼-turn "Twist-Off" was inevitable.

• • •

P.S. It's well to remember that this fundamental advance is the exclusive product of *White Cap research, White Cap engineering, White Cap facilities.* Here's excellent evidence that basic advances in the protection of foods-in-glass are always most likely to come from White Cap.

"VAPOR-VACUUM"
Seal and Re-Seal

WHITE CAP COMPANY
SUBSIDIARY OF CONTINENTAL CAN COMPANY

1-60

NEW "Twist-Off" CAP
NEW "Twist-Off" CAP
Delica
TOMATO CATSUP
Diner
CATSUP
ELKIN
TOMATO CATSUP
GIRARD
TOMATO CATSUP
CAL-TOP
CATSUP
Kerns
TOMATO CATSUP
Lea & Perrins
Lawton
Catsup

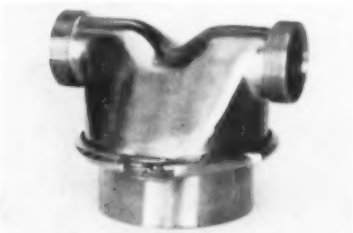
Burt Machine Co. 218
Exhibit: Continuous labeling operation, Models PCD and PCE, Burt Packers.
Personnell: J. L. Whitehurst, C. H. Neer, C. Magerkurth, J. L. Whitehurst.

C. I. T. Corp. 161
Exhibit: Details of long-term financing plans in purchasing canning machinery, on a "pay-as-you-depreciate" plan.
Personnel: E. T. Neville, E. H. Mayer, J. J. Heater, H. A. Post, J. F. Ebert, J. M. Camp, R. E. Wilson.

Canner/Packer 130
Exhibit: Soft chairs, hat racks, friends, good conversation.
Personnel: Mel Carlson, El Stark, Dennis Murphy, Tom Vought.

Canning Trade 131

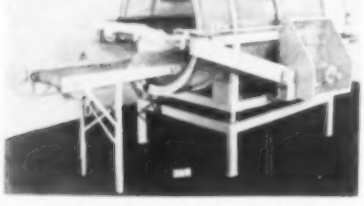
Canners Exchange, Lansing B. Warner 119
Exhibit: Hospitality booth where visitors can visit and relax and discuss insurance, rate engineering and fire protection.
Personnel: J. E. Warner, M. R. Feeney, M. R. Eddy, Clifford Branch, J. A. Witt, R. R. Ludwig, G. F. Binder, Emil Werner, A. E. Taylor, N. C. Barnard, F. D. Powell.



CESCO MAGNETIC trap has been developed for use in liquid or slurry lines for the removal of iron contaminates.

CESCO 155
Exhibit: Magnetic traps, plates and ducts, high pressure traps.
Personnel: D. E. Stem, A. J. Stem.

Cherry-Burrell Corp. 216
Exhibits: Thermutator, Flexflo pump, Spiraflex and other conveyors, clamp type fittings, Uniseal valves, Arovac dearator.
Personnel: J. L. Heid, J. J. Murphy, B. E. Black, W. J. Marier.



SNAP BEAN cluster cutter will be exhibited in the Chisholm-Ryder Co., Inc., booth.

Chisholm-Ryder Co., Inc. 213
Exhibit: CRCO cluster cutter for snap beans, bar type bean grader, plastic pocket grader, snap bean snipper, fillers, caser, feed table.
Personnel: M. C. Llop, E. A. McKinley, W. I. Carlson, A. Lee Towson, Jr., W. L. Newton, J. E. Hird, E. H. Huth, Wm. N. Hughes, T. L. Hoshall, C. F. Wiehrs, D. C. Osborn, F. A. Price, J. P. Louderman, J. M. Leavitt, J. A. Kearns, C. K. Murphy, Dave Faires, R. H. Allen.

Continental Can Co., Metal Can Div. 103
Exhibit: Lounge area for convenience of canners.
Personnel: R. L. Perin, R. S. Hatfield, O. R. McJunkins, G. F. Henschel, E. L. Hazard, W. B. Larkin, H. M. Blinn, W. W. Hodgson.

Continental Can Co., Boxboard and Folding Carton Div. 106
Exhibit: Jak-Et-Pak and Can-Trak multipacks.
Personnel: J. C. Dalton, T. E. Cathcart, W. M. Brown, N. Hansen and R. Weed.

Continental Can Co., Hazel Atlas Glass Div. 104
Exhibit: Lounge area and display of glass line.
Personnel: W. M. Cameron, J. G. King, J. W. Thayer, J. L. Hendrickson, E. Feliciotti, J. M. Duncan, R. E. Keller, M. J. Olds, M. C. Robinson and E. F. Westwood.

Corn Products Sales Co. 151
Exhibit: Globe brand and Rex brand corn syrup, Cerelose brand dextrose, Snow Flake brand and Buffalo brand starch.
Personnel: A. N. McFarlane, H. Plimpton, J. M. Krno, C. R. Waters, R. W. Bond, Fred Hassman, H. V. P. Francis, T. C. Clawson, J. E. Walz, J. P. Driscoll, M. D. Mullin, J. R. Von Bargen, D. H. Brosche, E. W. Beardsley, R. F. Cohee, W. H. Adcock, Grady Chism, T. A. Bruce.

Corneli Seed Co. 110
Exhibit: Performance of 1959 crops and 1960 seed requirements will be discussed with customers.
Personnel: W. B. Carter, M. B. Root, J. M. Bailey, R. F. Kramer.

Creamery Package Mfg. Co. 233
Exhibit: 1960 line of machinery featuring new applications for stainless rotary pumps, Crescent plate heat exchanger and CP "Swept Surface" tubular heat exchanger.
Personnel: G. N. Haxton, C. G. Hickerson, F. B. Hickerson, F. B. Hohenhorst, H. L. Mitten, C. E. Schick.

Crites-Moscow Growers, Inc. 113
Exhibit: Information regarding new varieties for pea seed needs of canners will be available.
Personnel: Marshall R. Cammack, Richard D. Williams, A. E. Koster.

Crompton and Knowles Pkg. Corp. 114
Exhibit: Standard single-layer and double-layer filled can packers with improved operating features. Built-in booster and minimum change-over time within size range.
Personnel: Leonard D. Kniffin, Jr., Richard J. Taylor, Lionel F. Shattuck, Darryl L. Shattuck, Robert A. Andrews, Lee E. Russell.

Crown Cork & Seal Co., Inc. 145

Dewey and Almy Chemical Div., W. R. Grace & Co. 121
Personnel: George W. Blackwood, Dunbar L. Shanklin, Carroll F. White, Richard W. Haward, Robert A. Clabault, Robert J. Douglass, Edward L. Mears, Morgan R. Day, William R. Page, George B. Kafka, Henry L. Gilbert, Robert M. Coquillette.

DIAGRAPH-BRADLEY will exhibit its electronic gummed tape dispenser.

Diagraph-Bradley Industries, Inc. 166
Exhibit: Young carton printer, Speedmodel stencil cutting machine, Stikfast label gummer, Rol-Flo Stencil roller, complete shipping room supplies.
Personnel: James R. Brigham, Thomas J. Gore, Clarence D. Finke.

Diamond Crystal Salt Co. 109
Exhibit: Alberger flake salt, Evaporated granulated salt, Southern Louisiana rock salt.
Personnel: W. Lonsdale, J. A. Selbee, C. W. Schornstheimer, William DeBardeleben.

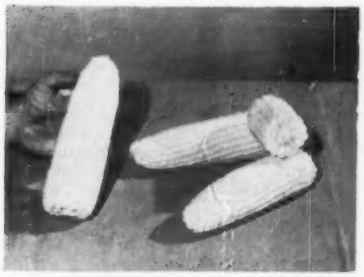
Dodge & Olcott, Inc. 149
Exhibit: Flavors and seasonings for all phases of the canning industry including an entirely new line of flavor seasonings spray dried flavor oils from whole spices.
Personnel: William Ammon, John Bouton, Jules Bauer, Harold Bachmann.

E. I. du Pont de Nemours & Co. (Inc.) 125
Exhibit: Display of food packages banded with "Cel-O-Seal" cellulose bands featuring various types of perforated bands for easy opening.
Personnel: Dr. M. V. Noble, T. W. Holland, E. A. Britton, D. R. Kinloch, R. L. Smith.

Economic Machinery Co., Div. of George J. Meyer Manufacturing Co. 215
Exhibit: Atkron Dumore can sort, model 6.5D, capable of operating at can speeds up to 850 per minute.
Personnel: James F. Parsons, G. L. N. Meyer, Jr., John M. Stein.

Electric Sorting Machine Co. 227

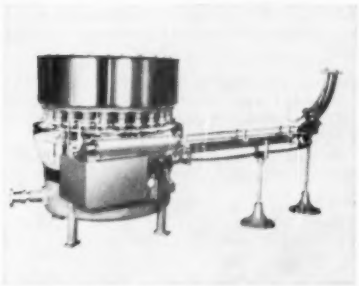
Emhart Manufacturing Co., Portland Div. 223
Exhibit: Standard-Knapp case loader—Type 860—will be demonstrated in handling aerosol type cans for concentrated instant orange drink.
Personnel: W. W. Lauer, L. E. Johnson, A. L. Johnson, S. W. Capper, E. E. Yeargin, A. J. Hetzel, E. King Graves, J. W. Hull, H. L. Lindberg, C. R. Strehlau, E. O. Sander, E. J. Dromboski.



VERY DEEP, NARROW kernels are characteristic of the new Ferry-Morse Golden Pirate-A, sweet corn. Ears 8½" long and 2¼" in diameter. 85-day maturity.

Ferry-Morse Seed Co. 135
Exhibit: Canned samples of commercial and experimental beans and corn.
Personnel: E. D. Weimortz, Ned Banton, Howard Marsh, John McCabe.

W. J. Fitzpatrick Co. 139
Exhibit: Flow diagrams covering new continuous production lines for a variety of food products.
Personnel: W. J. Fitzpatrick, Gordon W. Covey.



FMC 24-Valve juice filler is recommended for high speed, extremely accurate filling of liquids up to 1.045 specific gravity. Sanitary stainless steel construction of all contact parts.

Food Machinery and Chemical Corp. 240
Exhibit: 24-valve juice filler, 20-pocket M&S filler, 3-A Universal corn cutter, horizontal bar-type grader, Model 58 freestone pitter, Model 75-B finisher, automatic grapefruit peeler (Florida Division).
Personnel: B. C. Carter, C. K. Wilson, P. C. Wilbur, H. L. Link, F. J. Fay, T. N. Martin, R. G. Beverly, J. Wear, R. T. Ready, H. C. Vacketta, M. Whitman, S. A. Mencacci, W. D. Thomas, W. B. Bangerter, E. S. Anderson, C. Tack, T. Mansfield.

Gallatin Valley Seed Co. 132
Exhibit: A hospitality booth for friends and customers.
Personnel: H. B. Schlagenhauf, W. C. Hunter.

General Food Equipment, Inc., Dixie Way Machine Div. 236

Girdler Process Equipment Div., Chemetron Corp. 235
Exhibit: Votator equipment for continuous, closed, controlled processing and precise, continuous filling of liquid and viscous foods.
Personnel: Lamar D. Roy, Jr., Boyd B. Mahon, Jr., William J. Albrecht, Everett Minard, J. P. Thurman, F. A. Graham.

TOMATO MINCE MASTER exhibited by Griffith Laboratories, Inc., emulsifies so fine, 100 samples of catsup, puree and juice showed no separation or settling after 30 days.

Griffith Laboratories, Inc. 117
Exhibit: Tomato Mince Master, tomato products passed through Mince Master. Soluble seasonings, purified spices, batter and breading mixes.
Personnel: Andrew Maren, Joe Czarnecki, P. D. Bartholomew, F. W. Griffith, Charlie Nettleman, Steve Komarik, Howard Levy.

Groen Mfg. Co. 231

Frank Hamachek Machine Co. 208
Exhibit: Operating model of Key Vine Feed regulator and Durham mechanical hoist, pneumatic separator for cleaning peas, lima beans, etc., bulk salt dispenser.
Personnel: Frank Hamachek III, Richard L. Hamachek, William F. Irving, Nate Hughes, Harry H. Howeth, Harry H. Howeth, Jr., Bert W. Nevins.

Heekin Can Co. 101
Exhibit: A parlour style arrangement for convenience of customers to sit and relax.
Personnel: Albert E. Heekin, Jr., Charles L. Heekin, C. A. Rolfes, H. E. Uehlein, N. W. Haas, E. G. Grab, Jr., W. J. Hoye, N. M. Spain, E. J. Nolan.

Horix Manufacturing Co. 229
Exhibit: Steam sterilizer-cleaner for wide mouth jars, new bottom-fill technique to eliminate foam on filling. Pressure filling technique. Walking-beam and roll-through thermal processing units.
Personnel: H. H. Fairbanks, F. B. Fairbanks, Jr., R. G. Wirthlin, Renwick McWilliam.

International Salt Co., Inc. 224
Exhibit: Sterling Lixator, makes brine from rock salt. Sterling Brinomat, a new evaporated salt dissolver made of reinforced plastic.
Personnel: Howard E. Reith, Robert T. Story, Ben Wolverton, Jr., James H. Cain, Jr.

R. A. Jones & Co., Inc. 228

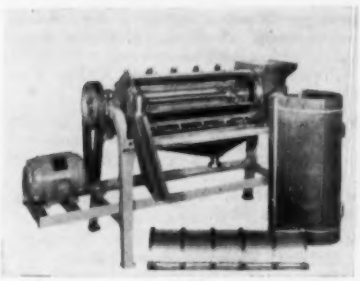
Karl Kiefer Machine Co. 205
Exhibit: "Pinpoint" Kiefer pressure vacuum filler, "Submerged" rotary vacuum filler, gas jet junior aersol pressure charger.
Personnel: Paul R. Fechheimer, Philip Hurlbut, Roy Heller.

Keystone Lubricating Co. 127
Exhibit: Specialized lubricants for canning machinery.
Personnel: B. N. Melsom, Arnold Bentsen, William Boger, N. W. Benjamin.

Klockhefer-Eddy Div., Weyerhaeuser Timber Co. 141

Knox Glass, Inc. 121-A

Ladish Co., Tri-Clover Div. 238
Exhibit: Sanitary bevel seat and Triclamp fittings and valves, sanitary pumps, sanitary butt welding, fittings, air actuated valves and controls, traps, filters.
Personnel: F. Hinrichs, W. F. Gardner, R. L. Nissen, J. L. Costigan, E. M. Howe, M. Anderson, R. P. Jones, S. F. Greenwood, F. Clark.



CITRUS PULP FINISHER, Langsenkamp Model 1755-36, recovers sugar solids normally lost with pulp waste. Four finishers connected in series recover around 75%.

F. H. Langsenkamp Co. 210
Exhibit: Citrus pulp washer and finisher, Indiana laboratory pulper, panel coil tank, "Big Spike" can shredder.
Personnel: F. S. Langsenkamp, Robert B. Connelly, Charles W. Templeton.

Lee Metal Products Co., Inc. 222
Exhibit: Miniature models of standard Lee equipment will be on display. These include steam jacketed kettles with and without agitators, pulp tank with coil, vacuum pan and cooling pan. A new line of direct radiant electric-heat kettles.
Personnel: J. M. Lee, T. J. Lee, A. L. Hellewell, Lon E. Kelly, Wm. J. Scarlett.

Link-Belt Company 234

Malayan Tin Bureau 147
Exhibit: Technical publications of the Tin Research Institute on tin plate and solder. Booklets on the uses of tin in the U.S. New cans, tin ore and concentrates.
Personnel: R. D. Coursen, Gladys Bingley, R. M. MacIntosh, J. R. Long.

Mead Containers 163
Exhibit: Corrugated shipping containers, new frozen concentrate drum, multicolor printing for corrugated containers, tray pack.
Personnel: John Hellweg, Robert Schaefer, William Wilson, Robert McHugh, Charles Freeman, Samuel Spencer, J. G. Donohoo, William Greenberg, Harris Behlert, William Connor.

Mead Packaging, Inc. 163
Exhibit: Cluster-Pak packaging system for packaging canned multiples of 2 to 12

units automatically, speeds up to 1200 units per minute.

Personnel: Henry H. Ogden, Robert M. O'Hara, William Smith, Edward Shelly, Kenneth T. Champness.

Metro Glass Co., Inc. **137**

Exhibit: Various sizes of glass containers.

Personnel: J. P. Moore, F. W. Considine, J. P. Clark, R. E. Delaplane, J. L. Lowry.

Michael-Leonard Co. **142**

Exhibit: A new canning-type sweet corn, Tenderfine Hybrid, resists root lodging and hot seasons. Ears have 18 to 20 rows. Cut samples will be shown.

Personnel: John Jacobs, R. W.(Woody) Richardson, John Kraemer, Dr. Stuart N. Smith.

Milwaukee Motive Mfg. Co. **165**

Exhibit: Abrasive coated asbestos tubes for abrasive peelers, recoating of cylinder and disc for batch-type peelers. Developed for food industry, the coatings are resistant to shock, breakage, heat, water, and mild acids.

Personnel: Robert Dyar, Arthur Kaszubowski.

Mojonnier Bros. Co. **150**

Exhibit: Latest designs of steam and Lo-Temp evaporators and fruit spread cookers.

Personnel: J. J. Mojonnier, Ken Pylant, Urban Ebel.

Morrison Bros. Seed Co. **108**

Exhibit: Varieties of seed peas.

Personnel: Edward H. Hughes, Mrs. Hughes, H. A. Resenhoeft.

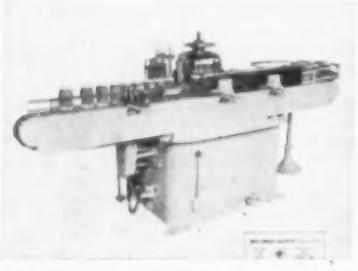
Morton Salt Co. **217**

Exhibit: Tablet depositor, Flocron dispenser, Scienco salt tablets, various combination salt tablets, high purity "999" canners salt, Model ER Brinemaker.

Personnel: J. D. MacGillivray, A. J. Wood, F. W. Hutchinson, E. F. Shields, W. W. Morrison, H. A. Turner.

National Can Corp. **134**

Personnel: R. S. Solinsky, J. B. Wharton, Jr., R. H. Winters, S. M. Hopkins, J. T. Shipley, W. H. Winters, J. S. Euphrat, F. B. McNamara, A. J. Ringman, S. V. O'Donnell, C. O. Wood, M. C. Gordon, E. F. Woelper, P. L. Brachle.



PONY LABELER "300" for spot labeling of round bottles will be shown in New Jersey Machine Corp. booth.

New Jersey Machine Corp. **220**

Exhibit: Semi-automatic and fully-automatic bottle labeling machines, featuring Pony 300 labeler, a continuous motion, spot labeler, capable of line speeds up to 300 bottles per minute.

Personnel: Mr. and Mrs. George von-Hofe, Richard Wellbrock, Arthur Schaefer, Ken Leeson, Helmut Voltmer.

Northrup, King and Co. **164**

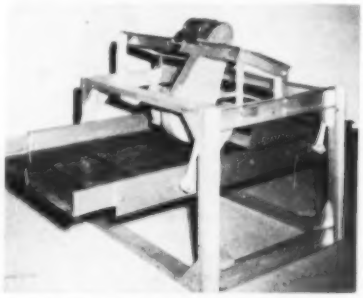
Exhibit: A reception area for a discussion of vegetable items, with samples of canned and frozen sweet corn and canned snap beans.

Personnel: L. W. Corbett, P. R. Walker, M. C. Hillery, C. G. Massie, W. A. King, Iver Jorgensen.

Oakite Products, Inc. **221**

Exhibit: Produce washing with detergent solutions, equipment for mechanized cleaning including Spray-O-Mat, Saniseptor, Hurriclean Gun, Whirl Spray.

Personnel: Ken C. Tucker, J. R. Vereen.



OLNEY VIBRATOR for dewatering and screening food products uses a Shaler Shaker mounted on rubber cushioned hangers.

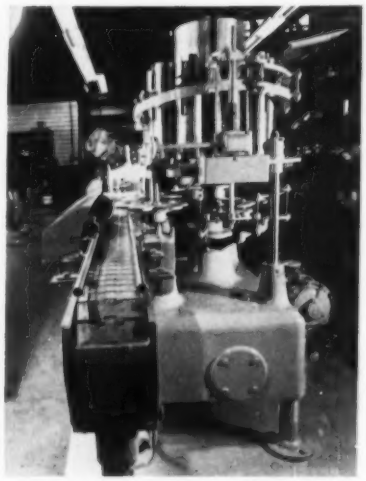
Geo. J. Olney, Inc. **160**

Exhibit: Olney vibrating screen for all food products.

Personnel: George J. Olney, Jr., John B. Olney.

Owens-Illinois Glass Co. **157**

Exhibit: Display of a variety of glass containers for packaging fruits and vegetables, metal and plastic closures, plastic fitments.



PFAUDLER ten-station rotary piston filler has a filling speed of 300 cpm, depending on container size and product. It features fast bowl adjustment, accuracy on fill mechanism.

Pfaudler Co.,
Div. of Pfaudler Permutit, Inc. **102**

Exhibit: Titan Centrifuge, Model C-12 gratity filler, Model RP-210 rotary piston filler.

Personnel: W. D. Pheteplace, H. E. P. Barta, B. T. Clarke, J. J. Hickey, W. H. Klee.

Pure Line Seeds, Inc. **115**

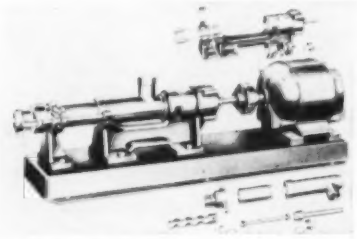
Exhibit: Booth is used for a conversation area for customers and friends.

Personnel: Dave H. Bolingbroke, Floyd W. Trail, Donald Bolingbroke.

W. A. Rice Co. **230**

Exhibit: Warsco bean cleaner, which removes rocks, splits, etc., from dried beans.

Personnel: S. Jackson Rice, C. Eugene Hefner.



MOYNO PUMP, a positive displacement pump for viscous liquids has been designed for food uses.

Robbins and Myers, Inc.,
Moyno Pump Div. **203**

Exhibit: Mayno food pumps designated for quick cleaning.

Personnel: F. H. Grim, R. H. Colbert, G. H. Zimmer, J. B. Bourke.

ROBINS will exhibit a new concept of a batter-and-breading machine. High frequency vibration pounds the breading into the product, permitting control uniformity and greater eye appeal.

A. K. Robins and Co., Inc. **201**

Exhibit: Robins Vibro batter and breading machine, Even-Flo regulator, mushroom trimming machine.

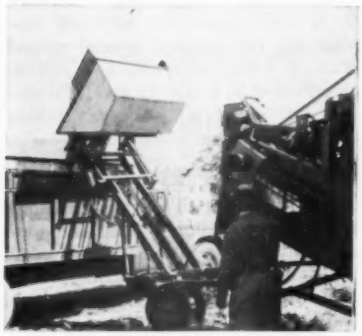
Personnel: Harry R. Stansbury, Robert A. Sindall, Jr., Louis E. Kibler, Sr., Louis E. Kibler, Jr., E. Stephen Lewis, L. LeRoy Kibler, Arnold Brodsky, M. Kurt Gunzenhauser, C. Edgar Schwab.

Rietz Manufacturing Co. **162**

Rogers Brothers Co. **112**

Personnel: Roger K. Rose, T. T. Hopkings, Hugh P. Dorr, J. R. Thompson, Charles Molcar.

Scientific Oil Compounding Co., Inc. 128
Exhibit: Cunilate wood seal, wood preservative for lugs, pallet bins. Cunilate treatment for viner aprons, Cunilate for mold-proof paints.
Personnel: Seymour Goldfarb, Dan O'Brien.

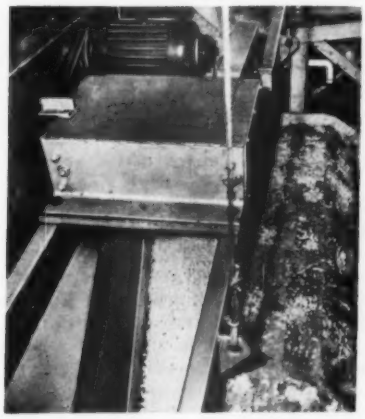


DUMP HOPPER designed for use with the Scott green pea and lima bean combine has a capacity of around 1,800 lbs. A new model for sweet corn, green beans on display in the Scott Viner booth has a capacity of 5,000 lbs.

Scott Viner Co. 212
Exhibit: Scale models of many units of harvesting machinery, processing and food handling equipment.
Personnel: Frank H. Copeland, George A. Knorr, Robert A. Stark, Charles M. Copeland, Mead S. Carmichael, Jr., Sherman R. "Pete" Carmichael.

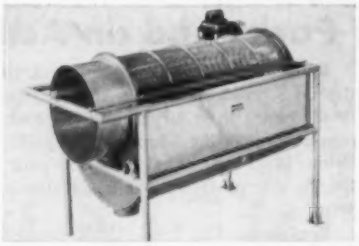
Sellers Injector Corp. 232
Exhibit: Hydraulic jet cleaners, rotor jet for tank cleaning, Jumbo tank cleaner, Model H portable tank cleaner.
Personnel: W. V. Sheronas, M. F. Sheronas, T. L. Hoshall.

Shuttleworth Machinery Corp. 144



FEEDING DEVICE for spreading material in a uniform depth over a belt 6, 8, or 10 ft. wide will be shown in motion pictures at the Simplicity Engineering Co. booth.

Simplicity Engineering Co. 118
Exhibit: Motion pictures of a newly developed feeding device which should be of interest to all frozen food processors.
Personnel: Wayne P. Green, Royce Taylor, Bruce A. Schmidt.



JUNIOR ROD WASHER of Sinclair-Scott Co. is designed to permit easy changing of rod reels for variety processing.

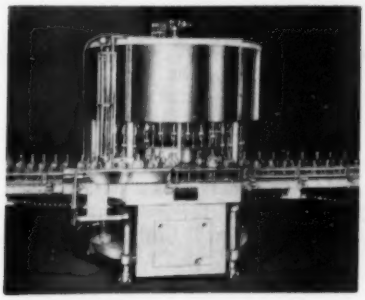
Sinclair-Scott Co. 122
Exhibit: Rod washers, hydro pumps, pea and bean hullers.
Personnel: B. N. Levene, L. Cantor, James T. Bailey, Herbert Fritz.

Wm. J. Stange Company 138
Exhibit: Spices, seasonings and certified food colors.
Personnel: C. A. Wood, B. L. Durling, F. K. Koepke, D. J. Ridenour, George Nuzum, William Brittin, V. C. Van Duzer, Phil Jones.

Sunkist Growers, Inc. 146
Exhibit: A great variety of foods in which lemon juice, orange juice, pectin, orange and lemon oils are ingredients. An orange-pineapple drink will be sampled.
Personnel: J. P. Haman, W. A. Delaney, Jr., D. R. Thompson, D. F. McMillen, J. A. Finley, J. F. Marshall, L. C. Gallagher, H. H. Holton, O. K. Burman, C. E. Scovern, Jr., J. T. McGolgan, R. D. Horner, E. L. Rhoads, C. W. Lindsey, J. R. Douglass, J. L. Livingston, T. W. Johnson.

Taylor Instrument Companies 239

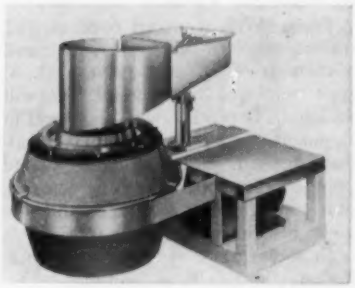
Thatcher Glass Mfg. Co., Inc. 140
Exhibit: Various type containers for foods and related products.
Personnel: G. J. Graham, J. L. Stanley, J. Welsch, J. P. Swift.



U. S. ROTARY Automatic Vacuum Filler has exclusive features for handling hot and cold liquids and semi-liquids which will be shown (in photographs) at the U. S. Bottlers Machinery Co. booth.

U. S. Bottlers Machinery Co. 214
Exhibit: Photographs of four liquid filling machines, two container air cleaning machines, two rinsers, one container feeder.
Personnel: A. G. Hornney, T. L. Hoshall, L. L. Keeler, Dwight Landreth, Watts B. King, I. H. Risser, C. R. Otters.

U. S. Steel Corp. 158
Exhibits: History of Canning Industry —soft drinks and hors d'oeuvers served in 1812 setting. Tin plate, stainless steel conveyor belting, pipe and tubular products.



URSCHEL POTATO CHIP slicer, a centrifugal slicer, has ben found suitable for cutting flat and corrugated slices of many foods. Unit uses low-cost, throw-away knives.

Urschel Laboratories, Inc. 202
Exhibit: Model "RA" Dicer set up to cut pieces ⅛" x ⅛" x ¼", Model "CC" Potato Chip Slicer, Model "OV" Transverse Slicer, set up to cut ¼" corrugated slices, Model "G" Dicer set up to make ½" cubes.
Personnel: Joe Urschel, Gerald Urschel, Kenneth Urschel, Ralph Burns, Curtis MacDonald.

Washburn Wilson Seed Co. 152C
Exhibit: An early, small sieved pea called "Corky" outyields Alaska. The vine type is very similar to Alaska and pods are borne in doubles and triples.
Personnel: Robert T. Felton, W. K. Markley, Walt Wilson.

Waukesha Foundry Co. 133
Exhibit: Sanitary displacement and centrifugal pumps, sanitary fittings and valves, corrosion resistant stainless steel and nickel castings. A complete liquid transfer package can be offered to the food industry.
Personnel: G. F. Funk, J. W. Weaver, G. F. Colvin, C. N. Monda, R. R. Watt, W. L. McBride, R. E. Holtgrieve.

Weyerhaeuser Co., Shipping Container Div. 141
Exhibit: Quad-Lok corrugated shipping containers.
Personnel: C. H. Carpenter, R. S. Savage, H. L. Simmons, E. K. Radke, J. S. Gilbert, M. Nix, L. W. Gegenheimer, A. T. Scott, F. V. Compton, R. L. Hansen, T. E. Neubert.

White Cap Co. 105
Exhibit: The traditional display of several thousand packages of food products will be displayed. Many new products will be shown. The new Snap-Reseal cap for tumbler packages will be shown for the first time.
Personnel: P. O'c White, G. P. White, R. P. White, J. C. Swift, A. D. King, C. P. Kolstedt, J. J. Scanlon, H. T. Stockholm, J. M. Murray, J. T. Farrell, W. M. Deuber, J. F. Logan, R. B. Anderson, N. R. Overtree, A. E. Lenzi, J. B. Laughlin, R. F. Norcott, H. W. Ohlhaver, J. C. Pacilio, R. B. White, D. H. Zipper.

1960 OUTLOOK: Big Packs and an Active Market

CANNED FOODS

Some Gains, Some Drops in Sight for 1960

Fruits: With a record pack of 101 million standard cases (24/2½s) and a carry-in of 18 millions, the U. S. fruit canning industry in 1959-60 will undoubtedly reach a new high level in shipments, probably close to 100 million standard cases. With continued population growth and strong demand, plus good growing conditions and adequate bearing acreage, the outlook is for another pack of close to 100 million standard cases in 1960-61.

Vegetables: Reduced acreage of same items has produced a U. S. 1959-60 pack of about 179 million standard cases (24/2s), but a larger opening carry-in has produced a total supply of a little over 220 million cases, about the same as that of 1958-59. With shipments brisk, and given good weather, the 1960-61 outlook is for a pack slightly above the 1959-60 level, but with individual product variations.

Juices: A 1958-59 canned and bottled fruit juice pack which ran a little larger than expected compensated for the smaller carry-in and gave the industry a supply of about 130 million cases (basis 24/2s). For 1959-60, the outlook is for a total supply of about the same size, resulting from a somewhat larger carry-in and a reduced pack.

Juice-drinks: Estimated U. S. production of ades, punches and juice drinks—largely canned—was 21 million cases (24/2s) in 1957-58 and 28 millions in 1958-59. Further growth is expected in 1959-60.

Meats: The U. S. canned meat pack, which has run slightly more than 30 million 48-lb. cases in recent years (excluding meat soups, spaghetti-meat packs), is running at about that level in 1959. The outlook for 1960 is for an output of a little larger size.

Spaghetti Items: The U. S. 1959 pack of spaghetti-meat items is running almost a fifth larger than that of 1958, or about 2.2 million 48-lb. cases. Further gain is in prospect for 1960. Data on non-meat spaghetti packs are not available.

Non-seasonal Vegetables: This industry has tended to increase production and sales moderately but steadily, and the 1958 pack was estimated at an all-time high of about 68 million cases (24/2s). The 1959 pack is believed to have run about that same size, and the outlook for 1960 is for a modest increase in some items.

Milk: The 1959 evaporated pack in the U. S. has run slightly smaller, the condensed a little larger, and the total output close to the 54 millions of 1958. While 1960 may equal the 1959 pack, the long-term trend has been downward.

Seafoods: The 1959 U. S. canned fish pack has run about three million actual cases below the 25 millions of 1958, it now appears. The industry could reach the 25-million-case level in 1960, if good catches materialize. The long-term production trend is slightly upward.

Baby Foods: The U. S. industry still does not report its production, but trade sources estimate the 1959 pack at about 24 million cases (24/2s). The 1960 pack should be of about the same size. The long-term trend is upward.

Soups: Gains in the U. S. 1959 packs of meat and poultry soups have about equalled declines in the output of vegetable items, and hence the year's pack is estimated at the 1958 level of about 49 million 30-lb. cases. The outlook for 1960 is for an increased pack, perhaps around 53 million cases.

Poultry: A canned poultry pack of around four million cases is indicated in 1959, up from about 3.6 millions in 1958. The 1960 output is likely to run about the same size as that of 1959.

Shortening and Lard: An increased second-half output is believed to have brought the 1959 U. S. canned fats pack up to the estimated 22-million-case level of 1958. The 1960 pack should run a little larger, because of a plentiful fat supply.

Coffee: The 1959 pack is estimated at about 44 million cases, up about 5% from 1958. The 1960 output is unlikely to exceed that of 1959, unless prices continue low.

Pet Foods: The U. S. 1959 pack ran about 42 million 48-lb. cases, according to preliminary indications; the fish pack was down, the meat and poultry output up. A small further increase is likely in 1960.

GLASSED FOODS

Another Record Pack Likely in 1960 Season

Total: The U. S. glassed food pack of 1959 has exceeded that of 1958 by about 5%, the gain in narrow-neck packs having been proportionately greater than that of wide-mouth containers. This points to a 1959 pack of about 361 million cases, a new record. The outlook for 1960 is for a slight further increase in production.

Fruits and Vegetables: The total U. S. 1959 glass pack of fruits, seasonal and non-seasonal vegetables, and juices is estimated at about 35 million cases, about in line with the 1958 output. The 1960 pack may run a little larger in some products.

Honey: The 1959 pack having run a little below that of 1958, it is possible the 1960 output will come up somewhat larger. Colonies were in good shape as the main honey flow ended, but unfavorable weather conditions—cold and wet weather in some areas, warm and dry in others—may prove harmful to hives and reduce 1960 production.

Peanut Butter: A considerable gain in butter production occurred in the U. S. in 1959, and nut utilization data indicate that 1960 will see another increase, adding up to 3 or 4%.

Preserves: No pack figures are available for recent years, but it is believed 1959 production was about on a par with that of other recent seasons, or around 32 million cases (largely 24/1-lb.). Poor berry crops, which held down 1959 packs, will also affect 1960 operations, since much of that year's outturn will come from the 1959 frozen packs.

Pickles: With the 1959 cucumber-pickle crop down to 13.9 million bushels, against 14.9 the year before, and with salt and dill stocks this past Oct. 1 totaling 9% less than a year earlier, the 1959-60 glassed pickle output is still estimated at about 45 million cases, against 49 millions the year before. The outlook is for a somewhat larger crop and pack in 1960-61.

Salad Dressings: With supplies of edible fats, oils and oilseeds at a record level 10% above the year before, U.S. 1959-60 production of salad oils and salad dressings will undoubtedly have reached a new high mark in 1959, and probably will increase still further in 1960. A pack in the neighborhood of 43 million cases appears to have been made in the year just past, and the 1960 outlook is for about 44.5 millions.

Tomato Products: Trade sources indicate that the U.S. glassed catsup pack has run about 22 million cases, considerably below the average of recent years. The glassed chili sauce output has apparently come close to the 1.5-million case mark at which it has recently been stabilized (24 bottles

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per case for catsup, 12 per case for chili sauce). The 1960 season will probably see increased output of both these items. No major changes in the production of other glassed tomato items are expected.

Miscellaneous Products: A major share of the credit for the continued growth of U.S. glassed food packing belongs to a wide variety of items classed as "miscellaneous." Included in the list are beverage powders, exotic condiments and sauces, nut meats, appetizers, desserts, conserves, and gourmet foods of many types. With the increasing public interest in specialty foods—which has led many retail outlets to set up gourmet food departments—the 1960 outlook is for still more gains in packs of these products.

FROZEN FOODS

Packs Continue Gains in 1960

Total Pack: Preliminary data indicate that the 1959 frozen food pack of the U.S. was about 6.4 billion lbs., up from less than 6.2 billions in 1958. The outlook for 1960 is for a further moderate increase in output.

Fruits: The 1959 pack is estimated at 600 million lbs., down from 610 millions in 1958. The 1960 season should see a larger outturn, unless berry harvests again prove disappointing.

Vegetables: The 1959 U.S. output is still estimated at 1,300 million lbs., excluding potato products. This is well above the 1958 figure, and is not likely to be surpassed in 1960.

Juices: The over-all 1959-60 pack of frozen juices, concentrates and ades is expected to add up to about 105 million gallons (roughly 1,050 million lbs.), up slightly over the record pack of 1958-59. If crops permit, the 1960-61 pack will probably show a modest further gain.

Convenience Foods: While individual firms and products have had setbacks, the general trend in the production of U.S. frozen food specialties continues upward. Frozen fish sticks slow down, but fish portions spurt ahead. One bakery product fails to sell, but another sets new records. Thus it is estimated that the 1959 frozen convenience pack has run close to 1,100 million lbs. The outlook for 1960 is for a modest further increase.

Other Products: U.S. 1959 packs of frozen eggs, fish, meats and poultry accounted for about 2.4 billion lbs., poultry being the largest item, eggs second, meats third and fish fourth. The outlook for 1960 is for an output approximately on a par with that of the season just passed.

DRY FOODS

1960 Output to Be Similar to 1959

Total Packs: The U.S. output of dry processed foods, which totaled about 19.4 million short tons in 1958, increased moderately to 19.7 millions in 1959, according to preliminary data.

Coffee, Tea, Cocoa: Coffee imports and U.S. packs in calendar year 1959 are believed ahead of 1958, reflecting the favorable market created by lower prices. The outlook for 1960 is for slightly higher quotations, and perhaps a somewhat smaller volume.

Cereals: Manufactured cereal products—breakfast foods and prepared flour mixes—both continue to show year-to-year gains. Their combined output in 1960 in the U.S. is likely to approach 2.0 million short tons.

Fruits: The 1959 season saw U.S. dried fruit production return to normal after the very light pack of 1958, the 1959 output being approximately 450 thousand short tons, including dates. The 1960 pack should be of about the same size.

Macaroni: Probably half a million short tons of macaroni, spaghetti, noodles and similar dry foods were produced in the U.S. in 1959. The industry looks for continued moderate growth in 1960.

Milk: U.S. packs of edible dry milk products totaled just under 1.0 million short tons in 1959, with nonfat milk as usual making up the major part of the output. A small gain is likely in 1960.

Nuts: The larger U.S. 1959 tree nut crop — particularly of almonds — is counter-balanced by a drop in the peanut output, plus smaller imports of cashews and Brazils. The 1960 season should see a somewhat smaller U.S. tree nut crop, plus larger imports.

Sugar: U. S. consumption of sugar in the first nine months of 1959 was approximately 7.1 million short tons, up 4% from 1958. The year's quota was increased by USDA from 9.2 to 9.4 million short tons. The outlook for 1960 is for sugar production and use about on a par with that of 1959.

Vegetables: The U.S. dry edible bean and pea crops were both substantial in 1959—965 and 210 thousand short tons respectively. Production of dehydrated potatoes also reached a new high (except for World War II) of approximately 50 thousand short tons. Other dehydrated vegetable items —peppers, onion, garlic, others—also showed upward trends. With the 1959 season setting records, it is unlikely that 1960 production will quite come up to the 1959 level.

Other Foods: Also showing vigorous production activities in 1959 were potato and corn chips, dried eggs, leavening materials, spices, dessert powders, flavor pastes and powders, and dry pet foods. The long-term trend for most of these foods is moderately upward.

CANNED FOOD PRICES

F.O.B. packing plant, per dozen containers, as of the first of the month indicated. Data compiled from latest available price lists of individual packers. Districts as follows:

ATLANTIC (Atl.)—Me., N. H., Vt., Mass., Conn., N. Y., N. J., Penna., Md., Del., Va.
SOUTH (S.)—N. C., S. C., Ga., Fla., Ky., Tenn., Ala., Miss., Mo., Ark., Ia., Okla., Tex., P. R.
MIDWEST (M.)—Ohio, Ind., Ill., Mich., Wis., Minn., Iowa, S. D., Neb., Kans.
WEST (W.) — Alaska, Ariz., Calif., Colo., Hawaii, Ida., Mont., N. M., Ore., Utah, Wash., Wyo.

Prices are in dollars and cents, with the dollar omitted when the range covers more than one dollar. When the range is 2 dollars or more, the prices are averaged.

$1.75 to $1.95 is written 1.75-95
$1.75 to $2.95 is written .75-2.95
$1.75 to $3.95 is averaged 2.95

CANNED FRUITS

	November 1, 1959		December 1, 1959	
	—303—	—10—	—303—	—10—
Apples, sliced				
Atl.		8.25-12.00		12.00
Wes.		9.25		9.50
Applesauce, fancy				
Atl.	1.30-40	7.10-50	1.30-40	7.50
Wes.	1.40	8.50	1.55-64	.50-9.00
Apricots, ch. hvls.				
Wes.	2.05	11.70-05	2.12-17	12.10-60
Cherries—Red Tart Pitted, water				
Atl.	1.90	12.50	1.90	12.50
Mid.	1.85-90	11.00	1.85	10.75
Wes.	1.95	10.50	2.07	10.50
Cherries—Sweet Unpitted, Wes. ch.				
dark	2.95	17.60	3.15	17.60
light	3.35	19.45	3.35	19.45
Citrus—Grapefruit (303 & 46 oz.) fcy. swtnd.				
So.	1.75	9.50	1.75	9.50
Citrus-Salad (303 & 46 oz.) fcy. swtnd.				
So.	2.80		2.80	
Cranberry Sauce (No. 300) fcy. puree				
Atl.	1.70-75		1.70-75	
Figs, choice				
Wes.	2.35	13.05	2.35	13.05
Fruit Cocktail, choice				
Wes.	2.12	11.85	2.12	11.85
Fruits For Salad, fcy.				
Wes.	3.05	16.75	3.05	16.75
Olives, Ripe (No. 1 Tall) Wes.				
lg.	2.90	18.10	2.90	18.10
ex. lg.	3.00	18.70	3.00	18.70
Peaches—Clingstone, Wes. ch.				
slice	1.75	9.50	1.75	9.50
hlvs.	1.75	9.50	1.75	9.50
Peaches—Freestone, ch. hlvs. Elb.				
Atl.				
So.				
Mid.	1.75	11.25	1.75	11.25
Wes.	1.90	10.35-75	1.90	11.25
Pears, ch. hlv. Bart				
Mid.	1.90	11.00	1.90	11.00
Wes.	2.05	11.50	2.05	11.50
Pineapple (No. 2) Wes. fcy.				
Slice	3.75	15.50	3.75	15.50
Chnk	3.42	14.70	3.42	14.70
Crsh	2.90	11.40	2.90	11.40
Plums—Purple, ch.				
Wes.	1.50	7.00	1.50	7.00

CANNED VEGETABLES

	November 1, 1959		December 1, 1959	
	—303—	—10—	—303—	—10—
Asparagus (No. 300) fcy. lg. green				
Atl.	3.40	12.00-50	3.40	12.00-50
Mid.	3.00	12.75	3.00	12.75
Wes.	3.00-40		3.00-40	
Asparagus, White				
Wes.	2.70-90		2.70-90	

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This unit has a holding capacity of 3288 three inch-diameter bottles or jars. Positive separated container control at entry through processing and discharge prevents undesirable glass-to-glass contact. Comes equipped with volume dryer.

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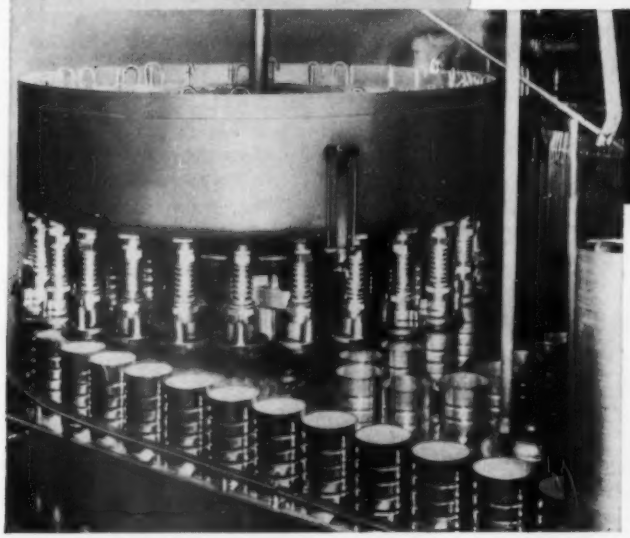
Designed for processing various products packed in a wide range of can sizes. Rolling action is slow, gentle and reverses itself at the end of each runway, thus assuring highly uniform processing. Requires an absolute minimum of floor space.



HORIX FILLER MODEL HAS-28

The recognized filler for filling juices and concentrates into cans from 202 to 404. It fills 500 6 oz. cpm or 210 46 oz. cpm. This model established an accuracy record for filling citrus juice into 46 oz. cans. Accuracy is maintained throughout the life of machine.

Write for descriptive literature.

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MANUFACTURING CO. · PITTSBURGH 4, PA.

	November 1, 1959		December 1, 1959	
	—303—	—10—	—303—	—10—
Beans, Green Lima, fcy. small				
Atl.	2.10	12.50	2.10	12.50
Mid.	2.15	12.00	2.15	12.00
Beans, Green Snap, fcy. cut (Wes. B. L.)				
Atl.	1.25-55	7.50	1.22-55	12.50
So.	1.50-60	8.50	1.35-80	.50-8.75
Mid.	1.30-55	8.25	1.55	9.00
Wes.	1.40	11.00	1.40	11.00
Beans, Wax Snap, fcy. cut				
Atl.	1.35-40	8.00-50	1.35-40	8.00-50
Mid.	1.40	8.50-95	1.40	9.25
Beets, fcy. sliced				
Atl.	.95-1.25	4.50	.95-1.00	4.50-75
Mid.	1.15	5.50	1.15	5.50
Wes.	1.35	6.10	1.35	6.10
Carrots, fcy. diced				
Atl.	1.15	5.90	1.15-30	.75-6.30
Mid.	1.00	5.00	1.00	5.00
Wes.	1.25	5.75	1.27	5.25-80
Corn-Golden, Cream & Kernel, fcy.				
Atl.	1.25-40	.50-9.00	1.25-45	.50-9.00
Mid.	1.30-40	8.00-25	1.35-40	8.00
Wes.	1.55	8.50	1.55-60	8.50
Corn-White, Cream & Kernel, fcy.				
Atl.	1.40	8.50	1.40	8.50
Peas, Green (No. 2 sieve), fcy. early				
Atl.	1.85	10.00	1.85	10.00
Mid.	1.70	9.50	1.45	8.00
Peas, Green (No. 2 sieve), fcy. sweet				
Atl.	1.85		1.85	8.50
Mid.	1.70	9.50	1.50	8.25
Wes.	1.75		1.75	8.20
Peas, Blackeye (No. 300) fcy.				
So.	1.20	7.50	1.20-30	6.25
Pimientos (4-oz.) whole, So.				
tin	1.15		1.15	
glass	1.85		1.85	
Potatoes, Sweet (No. 3-Vac.), fcy. syrup				
Atl.	2.30	10.00	1.65	9.50
So.	2.60	9.25	2.60	9.25
Potatoes, Sweet (No. 3 Vac.) fcy. vacuum				
Atl.	2.35		2.20	
So.				
Potatoes, White, fcy.				
Atl.	1.00-10	.50-6.25	1.00-10	.50-6.25
So.	.90-1.15	.20-6.30	1.25	6.50
Mid.				
Wes.				
Pumpkin (No. 2½), fcy.				
Atl.	1.50	5.50	1.50	5.50
Mid.	1.55	5.00	1.55	5.00
Wes.	1.55	5.00	1.50	5.00
Spinach, fcy.				
Atl.	1.40	7.00	1.45	7.00
So.	1.55	5.60	1.20	4.75
Wes.	1.20	4.75	1.20	4.75
Other Greens, So. fcy.				
trnp	1.00	4.95	.95	4.50
mstd	1.00	4.95	.95	4.50
poke	1.35		1.35	
Sauerkraut, fcy.				
Atl.	1.15	5.10	1.15	5.10
Mid.	1.25	5.75	1.25	5.75
Wes.	1.35	7.25	1.35	7.25
Tomatoes, Ex. Std. (Wes. fcy.)				
Atl.	1.40	8.00	1.50	8.00
So.	1.15	7.00	1.25	7.00
Mid.	1.40	8.00	1.50	8.75
Wes.	1.40	7.50	1.40	7.50
Tomato Catsup—Tin, fcy.				
Atl.		11.50		13.00
Mid.		10.00		10.00
Wes.		9.50		9.29
Tomato Paste (6-oz.) 26%				
Atl.		10.85		10.85
Mid.		10.85		10.85
Wes.		10.75	.90	10.50-85
Tomato Puree (No. 2½) fcy. 1.045 (Wes. 1.06)				
Atl.	2.00	7.00	2.00	7.00
Mid.		6.00		6.50
Wes.		10.50	2.65	5.50
Tomato Sauce (8-oz.) fcy.				
Atl.	.95		.95	11.00
Mid.				
Wes.	.75	8.00	.75	8.25
Mixed Vegetables, fcy. Peas-Carrots				
Atl.	1.55	9.50	1.55	9.00
Mid.	1.55	9.50	1.50	9.50
Wes.	1.70	10.00	1.70	10.00
Mixed Vegetables, Succotash, fcy.				
Atl.	1.50-95	11.00	1.50-95	11.00
Mid.	1.45	8.75	1.45	8.75
Mixed Vegetables, other				
Atl.	1.30	7.60	1.40-55	.50-8.00
Wes.	1.75	9.75	1.75	9.75

FROZEN VEGETABLES

(Retail per doz.)
(Instl. per lb.)
(Grade A)

	November 1, 1959		December 1, 1959	
	—Retail—	—Instl.—	—Retail—	—Instl.—
Asparagus—Jumbo, 10-oz., 40-oz.				
Atl.	4.50	.50	4.50	.51
Wes.	3.90	.43-.45	3.90	.43-.45
Beans, Fdhk, Lima—10 oz., 40-oz.				
Atl.	2.10	.19	2.15-59	.24
Wes.	1.55-65	19½-.21	.65-2.05	.15
Beans, Baby Lima—10 oz., 40-oz.				
Atl.	1.70	.19-.20	2.10-59	19-.22
Wes.	1.85	.19-.22	2.00	.17-.18
Beans, Green Snap—Reg. 9-oz., 40-oz.				
Atl.	1.75	.17½-.18½	.88-2.05	
So.				
Wes.	1.40	.17½	1.50-.55	.17
Beans, Green Snap—Fr. Cut 9-oz., 40-oz.				
Atl.	1.75	.17-.18	.88-2.05	
So.				
Wes.	1.50	.17	1.50	.16-.18
Beans, Italian—9-oz., 40-oz.				
Atl.			2.35	
So.				
Wes.	1.85	.20½	1.85	.20
Broccoli—10 oz., 32-oz., Spears				
Atl.		.20	2.20-38	.22
So.				
Wes.	1.45-80	.17	1.55-80	.18
Brussels Sprts.—10 oz., 32-oz.				
Wes.	1.75-85	.22½-.24	.95-2.35	.24-.26
Carrots—50#				
Atl.				.07
Wes.		.07		
Cauliflower—10-oz., 32-oz.				
Atl.	2.15	.19	2.20-38	.19-.22
Wes.	1.55	.18	1.40-80	.15-.18
Corn, Cut—10-oz., 40-oz.				
Atl.	1.80	.21	1.50-89	.19-.22
Mid.				
Wes.	1.45	.18	1.50	.16
Corn, Cob—2-ear, 12-ear				
Mid.	2.20		2.69	
Wes.	.90-1.75		1.30-85	
Kale—10 oz., 32-oz.				
Atl.	1.60	.13	1.60	.13
Mixed Vegetables—10-oz., 40-oz.				
Atl.	1.75-90	.18	.75-2.05	.20
Mid.	1.45	.18	1.45	.18
Wes.	1.50-55	.18	1.60	.16-.18
Okra—10-oz., 40-oz.				
Atl.	1.70	.22	1.70	.22
Peas, Blackeye—10-oz.				
Wes.	2.25		2.25	
Peas, Green—10-oz., 40-oz.				
Atl.	1.50	.15½	1.50-67	.16
So.				
Mid.	1.35	.16	1.35	.16
Wes.	1.15-25	.13-.14½	1.30	.12-.15
Peas & Carrots—10-oz., 40-oz.				
Mid.	1.17	.16	1.17	.16
Wes.		.15	1.25	.13-.15
Potatoes—9-oz., 40-oz. Atl.				
F. P. whip	1.60-70	.19	1.60-69	.19
shred	1.80		1.80	
puffs	1.63		1.63	
Potatoes, 9-oz., 40-oz. Wes.				
F. F. whip	1.35	.12½	1.35-40	.16
shred puffs	.07	.07	1.25	.07½
Pumpkin & Squash—12-oz., 4-lb.				
Atl.	1.10	.08½	1.10	.08½
Wes.	1.20	.09	1.20	.09½
Rhubarb—10-oz., 30#				
Wes.				
Spinach—10-oz., 48-oz., Leaf				
So.	1.70	.09½	1.70	.09½
Wes.	1.20	.08½	1.20-1.35	.08½
Spinach—10 oz., 40-oz., chopped				
So.	1.70	.10	1.70	.10
Wes.			1.05-35	.09
Other Greens—10-oz., 48-oz. So.				
Mstd				
Trnp				
Succotash—10-oz., 40-oz.				
Atl.	1.85	.20	.88-2.15	.21
Mid.				
Wes.	1.60	.18-.20	1.90	.16-.20

FROZEN FRUITS

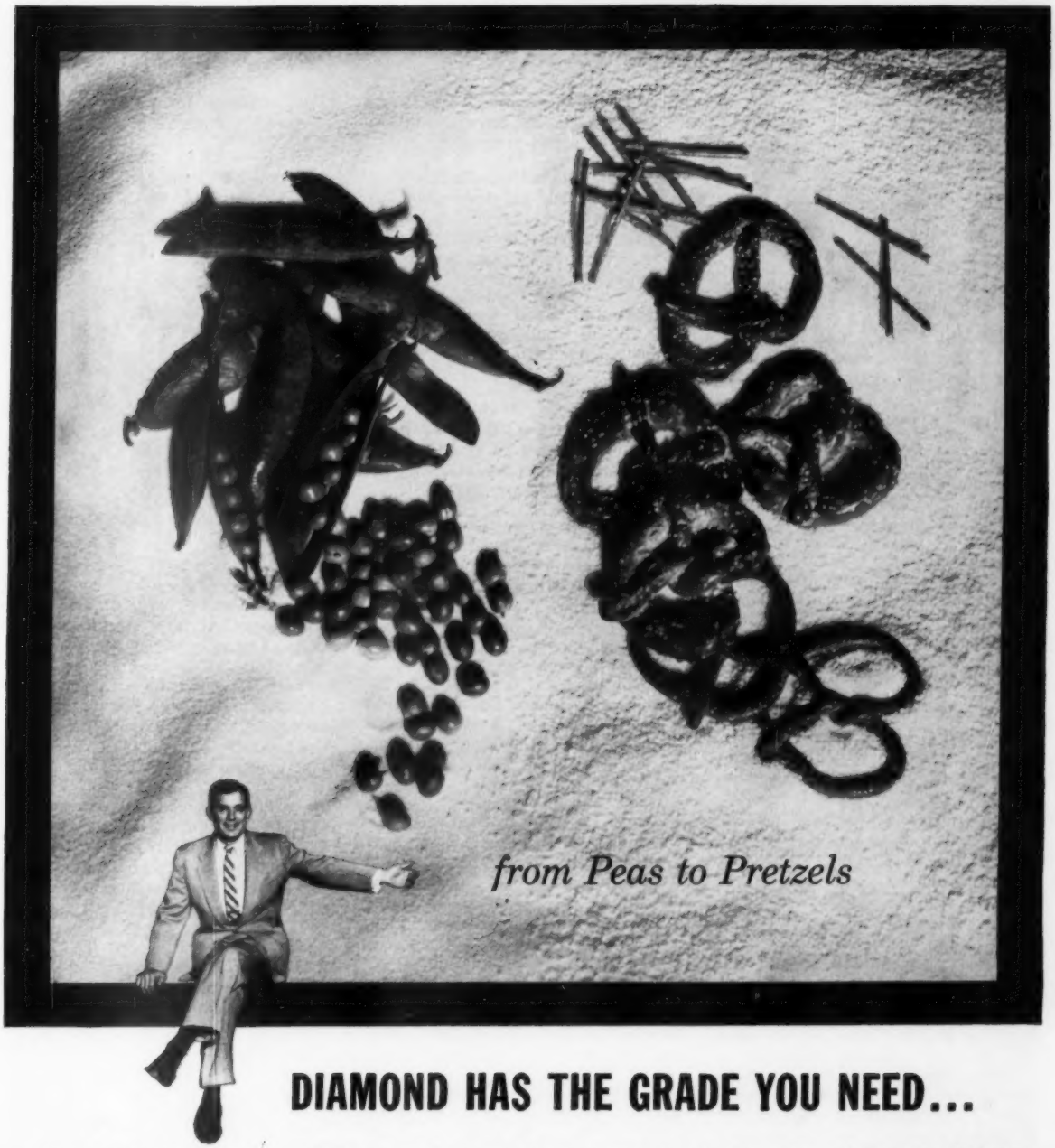
	November 1, 1959		December 1, 1959	
	—Retail—	—Instl.—	—Retail—	—Instl.—
Apples (30# sliced)				
Atl.		.11½-.13		.11½-.13
So.		.12		.12
Mid.				
Wes.		.11½-.12		.08½-.09
Apricots (30# halved)				
Wes.		.11		.11
Cherries, Red (30# Pitted)				
Atl.		.13-.14½		.13-.14½
Mid.		.13		.13
Wes.		.12-.14		.12-.14
Cherries, Sweet (30#)				
Wes.		.10-.20		.10-.20
Grapes and Pulp (44#)				
Atl.		.12½		.12½
Peaches, Freestone (1-oz., 30# sliced)				
Atl.	2.58	.18	2.58	.18
Mid.		.13		.14
Wes.	2.05	.13-.13½		.13-.14½
Blackberries (30#)				
Wes.		.14-.18		.14-.18
Blueberries (30#)				
Atl.		.25-.28	3.29	.25-.28
Mid.		.25		.25
Boysenberries (30#)				
Wes.		.13½		.13½
Raspberries, Black (10-oz. 30#)				
Atl.		.22		.22
Wes.		.23-.24½		.23-.24½
Raspberries, Red (10-oz., 30#)				
Atl.	2.25	.23-.24	2.30-90	.23-.24
Mid.	2.20		2.20	
Wes.	1.95	.20-.22	2.20	.23
Strawberries (10-oz. sl., 30# whl.)				
Atl.	2.25	.25	2.35-56	.25
Wes.	2.20	.19-.21	2.15	.19-.21
Mixed Fruits (12-oz.)				
Wes.	2.75		2.75	

FROZEN JUICES

(Retail per doz. 6-oz.)
(Instl per doz. 32-oz.)

	November 1, 1959		December 1, 1959	
	—Retail—	—Instl.—	—Retail—	—Instl.—
Grapefruit				
So.	1.00-32	5.50	1.00-42	5.50
Lemon				
Wes.	.88		.88	
Lemonade				
So.	1.06		1.16	
Wes.	.87		1.23	
Lemonade, Pink				
Wes.	.88		1.16	
Limeade				
So.	1.00-22	6.00	1.00-.32	6.00
Orange				
So.	2.00-37	9.50	2.00-37	.50-9.00
Wes.	2.37		2.37-58	

THE PICKLE CROP AND PACK (glassed pickes) will be slightly larger during 1960-61 than in 1959.



DIAMOND HAS THE GRADE YOU NEED...

. . . because technicians responsible for quality and flavor control in the Canning and Packing Industry know that only a salt with unmatched cleanliness and purity can be used. Diamond Crystal Salt meets all requirements in the type of grade needed . . . insuring that quality of pack will not be lowered by harmful impurities such as calcium and magnesium. Diamond Crystal Salt is produced from sterile brine with an extremely low content of pro-oxidants, copper and iron. If quality makes a difference in your product, then the quality of the salt you use makes a significant difference.

For more information, call the nearest Diamond Crystal Sales office or write Diamond Crystal Salt Co., St. Clair, Michigan.

Diamond Crystal Salt Co.

ST. CLAIR, MICHIGAN

Sales Offices: Akron • Atlanta • Boston • Charlotte
Chicago • Detroit • Louisville
Minneapolis • New Orleans • New York

Plants: Akron, Ohio • Jefferson Island, Louisiana
St. Clair, Michigan

SUPPLIERS NEWS

Companies & Plants

Sentry Equipment Corp. is a newly formed firm that will manufacture and distribute the complete line of Henzey processing and power plant equipment. The new firm is owned and controlled by the Henszey family and is located in Watertown, Wis.

Ball Brothers Co. is constructing a new glass plant near Asheville, N. C.

Waukesha Foundry Co., has introduced a long list of new products. Its newly diversified pump line includes a new line of sanitary and industrial centrifugal pumps. According to Richard R. Wright, president, this was the first step in the company's plan to further expand and diversify its present product line to reach the liquid handling industry.

Union Carbide Corp., New York City, will construct new units at its Seadrift and Texas City, Texas, plants. Completion is scheduled for 1961. When completed, these two units will add 170 million lbs. per year to Union Carbide's output of high-pressure polyethylene.

Diamond Gardner Corp., producer of packaging materials, and U.S. Printing & Lithograph Co., producer of multi-color printed packaging and advertising materials, recently merged. The new firm will be known as Diamond National Corp.

Dow Corning Corp., Midland, Mich., is building a technical service and development laboratory in Greensboro, N. C. It will be part of the Product Engineering Dept. under the direction of T. A. Kauppi of Midland. William H. Ragborg will manage the lab.

Louis Allis Co., Milwaukee, Wis., manufacturer of electric motors, generators, and adjustable speed drives, is building a research and development center in Greendale, Wis.

Miles Chemical Co., Elkhart, Ind., a division of Miles Laboratories, Inc., has begun production in its $3.6 million citric acid plant. It is estimated that the new plant will double the company's current citric production with an annual output of over 15,000,000 lbs.

I. W. Tucker has opened an office in Louisville, Ky., with affiliates in New York and Washington, D. C., offering industrial research consulting services. Emphasis will be given to complex natural products, foods, beverages, flavors, agricultural commodities, insecticides, enzymes and related products and processes.

E. I. du Pont de Nemours and Co., Wilmington, Dela., is making an addition to its Richmond, Va., plant for the production of polyethylene film for packaging. The plant will begin production early in 1960.

Associated Seed Growers, Inc., New Haven, Conn., recently opened its new enlarged headquarters at 272 George St.

Chain Belt Co., Milwaukee,, Wis., has acquired the Carrier Conveyor Corp., manufacturer of vibrating conveyors, and its subsidiary, General Industries, both of Louisville, Ky.

Paper Products Div., **Owens-Illinois Glass Co.,** Toledo, Ohio, has officially opened its new Chicago plant for the production of corrugated boxes. The plant is equipped with a corrugator capable of turning out more than 65 million sq. ft. of corrugated board per month.

Phillips Petroleum Co. and **Joanna Western Mills Co.,** have formed a jointly-owned firm Phillips-Joanna Co. to produce all types of polyethylene film. The new firm's headquarters will be in Chicago, Ill.

Continental Can Co., New York City, will build a $1 million addition to its plant in Tampa, Fla. The expansion will increase the company's can lithographing and coil-shearing operations.

Men in the News

J. E. Warner has been elected to the newly created office of board chairman and chief executive officer, Lansing B. Warner, Inc., Chicago, Ill. M. R. Feeney has been elected president; N. H. Tobey, senior vice president; and Morris R. Eddy, vice president in charge of sales.

W. G. Schopf

F. W. Britt

William G. Schopf has been appointed director of public relations and advertising for Packaging Corp. of America, Rittman, Ohio.

Frank W. Britt has been elected president of Demuth Glass Works, Inc., Parkersburg, West Va., a subsidiary of Brockway Glass Co., Inc., Brockway, Pa. **F. B. Hess,** president of Brockway, was elected chairman of the board of Demuth.

H. V. Fulton

V. I. McCarthy

Howard V. Fulton has been elected vice president in charge of west coast operations, Anchor Hocking Glass Corp., Lancaster, Ohio.

Vern I. McCarthy, Jr., has been named president and director of marketing, Vulcan Containers Inc., Bellwood, Ill., manufacturer of steel shipping containers.

M. Neal Burleson, formerly manager of can market sales, has been appointed to a newly created position of product director for aluminum cans and rigid foil containers, Reynolds Metal Co., Richmond, Va.

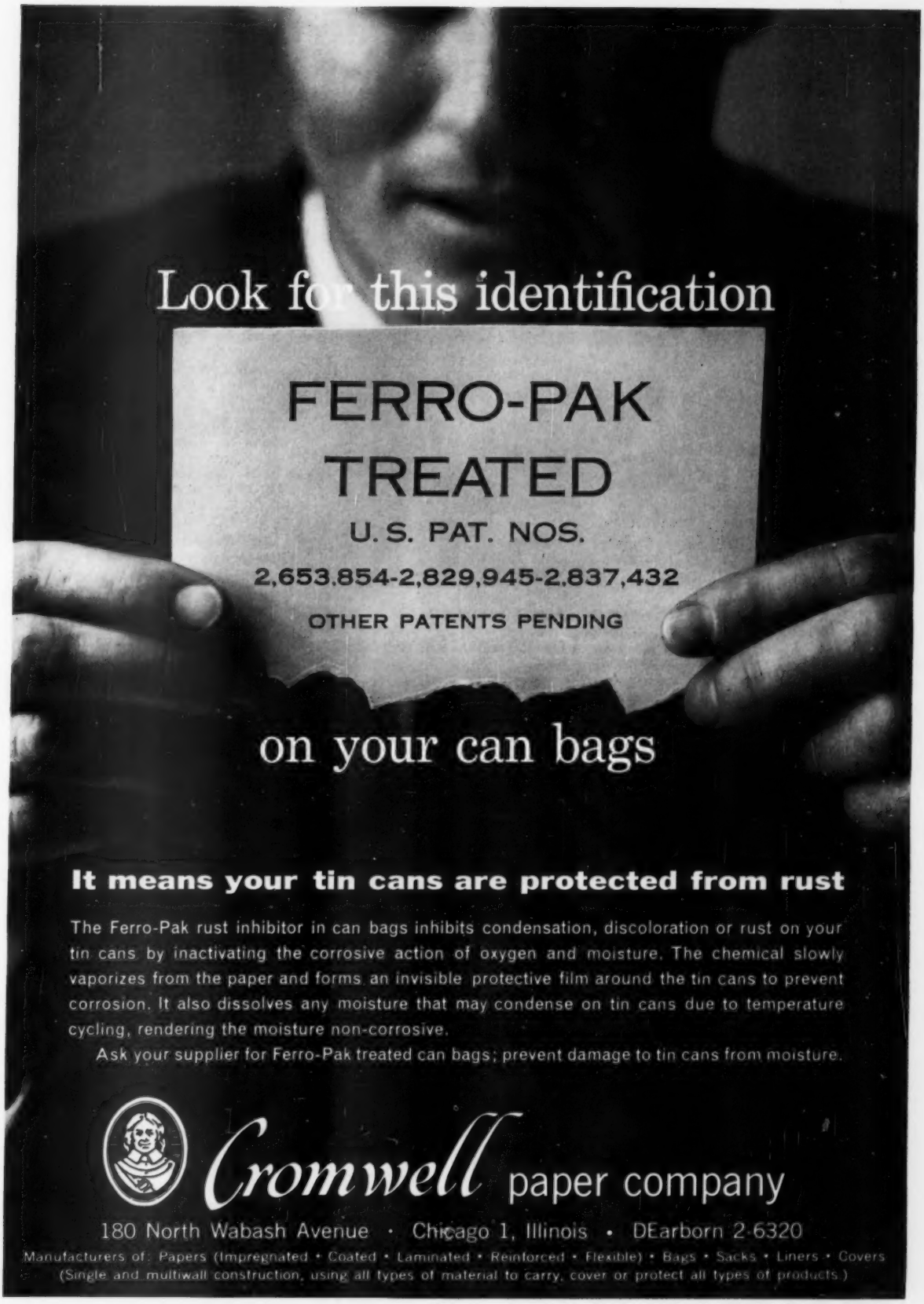
Dr. Charles R. Hunt has joined Geigy Agricultural Chemicals, Div. of Geigy Chemical Corp., Yonkers, N. Y., as technical field representative in Montana, North and South Dakota, Wyoming, Minnesota, Iowa, Nebraska Kansas and Colorado.

S. R. Panter has been named sales manager of eastern region, Paper Container Div., Continental Can Co.; and **W. J. Simons,** sales manager of the central region.

John M. Seabrook, president, Seabrook Farms, Bridgeton, N. J., has been elected chairman of the board of Frick Co., Waynesboro, Pa., manufacturer of refrigerating equipment.

Alfred P. Terna has been appointed manager of aluminum foil sales, Foil Div., Revere Copper and Brass Inc., New York City.

Hazen P. Masters has been named Baltimore, Md., district sales manager,



It means your tin cans are protected from rust

The Ferro-Pak rust inhibitor in can bags inhibits condensation, discoloration or rust on your tin cans by inactivating the corrosive action of oxygen and moisture. The chemical slowly vaporizes from the paper and forms an invisible protective film around the tin cans to prevent corrosion. It also dissolves any moisture that may condense on tin cans due to temperature cycling, rendering the moisture non-corrosive.

Ask your supplier for Ferro-Pak treated can bags; prevent damage to tin cans from moisture.

Cromwell paper company

180 North Wabash Avenue · Chicago 1, Illinois · DEarborn 2-6320

Manufacturers of: Papers (Impregnated • Coated • Laminated • Reinforced • Flexible) • Bags • Sacks • Liners • Covers
(Single and multiwall construction, using all types of material to carry, cover or protect all types of products.)

SILICONE NEWS from Dow Corning

Prevent Costly Foam

Dow Corning Silicone Defoamers Reduce Waste, Increase Capacity

Foam is costly . . . it takes up production space, slows down processing, causes maintenance problems—may even create a fire hazard! You can control foam once and for all with the most effective antifoams ever developed: Dow Corning silicone defoamers.

Odorless, tasteless, and physiologically harmless, Dow Corning silicone defoamers are used extensively in processing and packaging foods, syrups, and antibiotics. Effective at extremely low concentrations and safe to use, they neither alter nor contaminate the end product. Dow Corning Antifoam A may be used in nonstandard foods at concentrations to 10 ppm; water-dilutable Antifoam AF Emulsion may be used at concentrations to 34 ppm.

IN FREEZING MIXES

A typical application: in making Fudgsicles, foaming of milk, chocolate and other ingredients caused numerous rejects of frozen bars and also cut production space. Antifoam AF Emulsion added to the processing prevents foam . . . helps keep production up and costs down.

IN ANTIBIOTICS

Write for a FREE SAMPLE giving an indication of your foaming problem and whether it's in an aqueous or oil system. Address Dept. 4401.

first in silicones

Dow Corning CORPORATION

MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.

Metal Div., Continental Can Co., New York City. **Robert H. Short** has been appointed district sales manager in Kansas City, Mo., for the Hazel-Atlas Glass Div.

Henry Kittell, formerly West Coast sales representative, has been named assistant sales manager of Cochran Continental Container Corp., a subsidiary of Anaconda Aluminum Co., Louisville, Ky.

Donald K. Ballman and **C. B. Branch** were elected vice presidents of Dow Chemical Co., Midland, Mich. Both are Dow directors.

John M. Stein has been appointed resale products manager and **Herbert V. Thalin,** manager—standard products, (sales department), Economic Machinery Co., Worcester, Mass. **William Schonman, Jr.** has been appointed chief industrial engineer.

E. R. Gamiel has been appointed sales manager for Goodyear Pumps Inc., New York City.

Jack Welsch has joined Thatcher Glass Manufacturing Co., Inc., New York City, as vice president—glass container sales.

Ralph R. Wyckoff has been appointed advertising manager of Baker Industrial Trucks, Div. of Otis Elevator Co., Cleveland, Ohio.

Glenn Carnine has been appointed chief control chemist at the Buffalo, N. Y., main plant of Becco Chemical Div., Food Machinery and Chemical Corp.

Donald J. Lundstrom has been appointed assistant to the sales manager, Container Machinery Div., E. W. Bliss Co. He will headquarter at the division's plant in Hastings, Mich.

Paul L. Brachle has been appointed to the executive sales staff of National Can Corp.

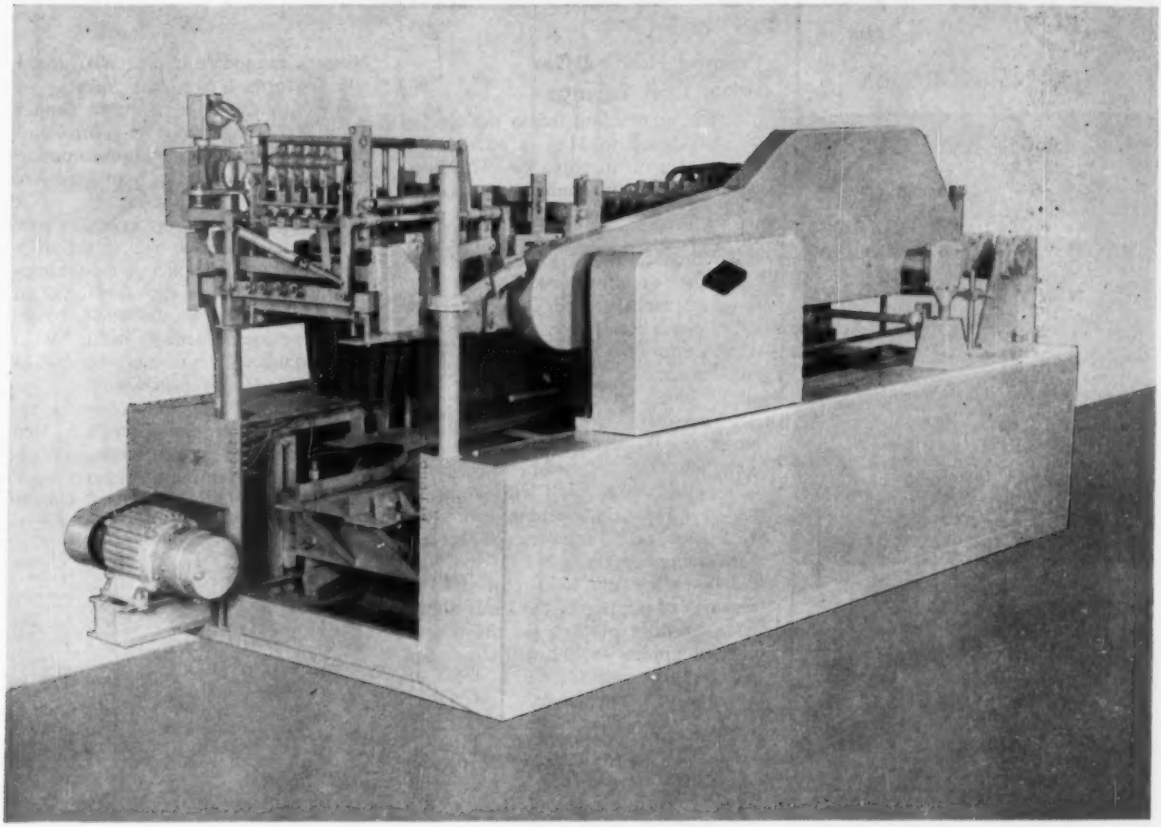
H. W. Bevarly has been promoted to manager of mechanical research and development, Girdler Process Equipment Div., Chemetron Corp., Louisville, Ky.

Obituaries

Arch Payne, 60, recently elected assistant vice president of Florasynth Laboratories, Inc., New York City, died suddenly while on a business trip in Richmond, Va.

Joseph Cereghino, 81, retired executive of the American Can Co., died recently. Mr. Cereghino lived in Los Angeles, Calif.

NEW!... from ATKRON DUMORE



Continuous Motion Case Packer

Interchangeable heads pack all bottles or cans in single or multiple layer cases!

- FAST—Packs up to 30 cases per minute
- NO COMPRESSED air required
- POSITIVE PACKING CONTROL — Any irregularity in supply of bottles, cans or cases automatically delays packing drop until corrected by machine itself or operator
- SIMPLE OPERATION—Requires only casual attention of one man
- COMPACT — Small space requirements compared to machine capacity . . . 4' 9½" by 10' 4" in conveyor layout
- ELIMINATES bottle or label scuffing
- EASY CHANGEOVER for different bottles or cans (sizes and packs) can be accomplished in only 20 minutes
- ADAPTABLE TO PLANT LAYOUT—Fits all standard conveyors at standard conveyor heights
- LOW INITIAL COST and minimum maintenance

to cut your new can handling costs . . .

ATKRON DUMORE AUTOMATIC CAN SORTERS AND UNCASERS

. . . Automatically uncase, align and orient new cans ready for filling
. . . Adaptable for cans received in reshipper cartons, shipper trays, bags or bulk
. . . Speeds up to 1200 cans per minute with casual attention of only one man
. . . Models to handle all standard cans—6 oz. to 5 quart; cone top, screw cap and pressurized cans; rectangular, square and most specialty can styles.

Check other ATKRON DUMORE Equipment: Full depth and half depth Uncasers and Four Flap Case Openers. Write for complete information . . . it can easily make the difference between profit and loss in your plant.

ATKRON DUMORE

MANUFACTURED BY ATKRON, INC., CUYAHOGA FALLS, OHIO

Distributed and Serviced exclusively by GEO. J. MEYER MANUFACTURING CO. MILWAUKEE, WIS.

and ECONOMIC MACHINERY CO. WORCESTER 3, MASS.
Division of Geo. J. Meyer Manufacturing Co.

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Reliable!

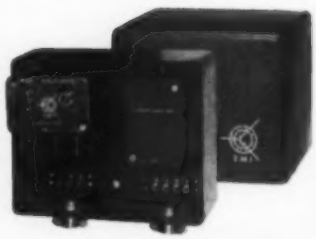
TRANSISTORIZED

CONTROLLERS and COUNTERS

EMI

Now you can have controllers or counters which are virtually maintenance free, moisture and dustproof.

Use optical or proximity pick-up for counting or controlling.



For complete brochures and price information write directly to:

ELECTRO MECHANISMS, INC.
510 W. Ash Ave.
Fullerton, Calif.

Canned Foods Offer Labor Cost Savings

It has been found that a savings in labor costs up to 31% is possible in the making of an apple pie. This is a result of a study conducted to compare costs and time standards in preparing apples.

To prepare an 18 lb. batch of apples, the quantity specified in the standard recipe for 100 servings of apple pie, it was found that 116 steps were required when starting with fresh apples and 31 steps with frozen apples. Only 28 steps were needed to get three cans of No. 10 canned apples from the storeroom and opened. Time involved in these operations was: 52 minutes, 48 seconds with fresh apples; 2 minutes, 32 seconds with frozen apples; and 2 minutes, 20 seconds with canned apples.

Comparing the total cost of 100 servings of apple pie, the study showed: a savings of 20% in the use of canned apples—$7.09 with fresh apples, $6.91 with frozen apples, and $5.69 with canned apples.

—Dr. Lendall H. Kotschevar, professor in Hotel, Restaurant and Institution Management, Michigan State University.

Promotion Idea Sold to Wholesale Buyer

Snow Crop has repeated last year's promotion for its Snow Crop frozen orange juice. A special "teaser" box was prepared to present the program to the wholesale buyer. The box had a multiple-page cover that included a brief promotion story, ad reproductions, and point-of-sale literature. The last page of the cover has a dramatic "punch line." When it is lifted, an exact replica of the Teddy Snow Crop doll pops up out of the box into full view of the buyer.

Last year the consumer got a doll for 50c and three can tops from either the 6 oz. or 12 oz. size of Snow Crop frozen orange juice.

This year, on Food Day, during the week of Dec. 1, 1,000-line ads appeared in some 50 newspapers. In addition, 500-line ads were run in 43 other papers.

—E. H. Coale, national sales director, Snow Crop, Minute Maid Corp., Orlando, Fla.

Grower/Canner Committees Join to Increase Sales

A new grower-canner advertising fund is being planned in an attempt to increase export and home sales of Niagara canned fruit. The new group will be formed from the merging of two committees of the Ontario Tender Fruit Marketing Board—Export Committee and the Marketing Promotion Committee of Canners and Growers —if the members approve.

One of the first projects of the new committee would be the rental of a booth and display space at a commonwealth wide home show in England this March. The group would be financed through deductions of 50c a ton produced by growers plus 50c a ton purchased by processors.

The group's operation would resemble that of the Canadian Red Cherry Institute, which has been highly successful in promoting cherry sales.

—Keith Matthie, secretary, Ontario Tender Fruit and Marketing Board, St. Catherine, Ontario.

CLING PEACHES and FRUIT COCKTAIL are in good shape for the New Year; new packs are slightly larger than any before. California's cling peach industry plans to spend $1,500,000 on a full-scale promotion program by mid-1960.

Demand For Convenience Foods To Increase

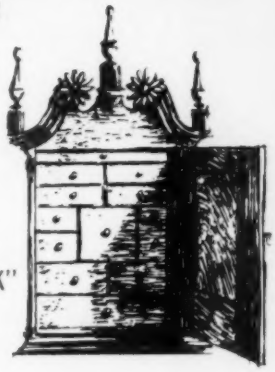
Statistics indicate that Americans will come close to spending $50 billion in the nation's grocery stores within the next two years. The rise in grocery store sales, in part, is due to an increasing demand for convenience foods.

For example, 1959 frozen food sales are estimated at $1.96 billion. This is more than double the dollar volume of seven years ago, and 7% higher than 1958. Frozen food sales represent about 4% of the total grocery store

FLORASYNTH

SPICEAROMES

BLACK PEPPER
CATSUP
CELERY
CLOVE
CUMIN
DILL PICKLE
DILL PICKLE "K"
GARLIC
RED PEPPER
SWEET PICKLE
SPICEAROME "M"



Highly concentrated water miscible flavors ready for use "as is"

NATURALLY, TECHNICALLY, ECONOMICALLY
FLORASYNTH'S
NATURAL POWDERED CITRUS JUICES
are the most advanced on the market. Easy to handle in production these powdered citrus juices are free flowing, contain more juice solids, are lower in cost, have increased stability and shelf life, and make your product superior.
LEMON
ORANGE
GRAPEFRUIT
LIME
Florasynth
LABORATORIES, INC.

Florasynth
LABORATORIES, INC.

EXECUTIVE OFFICES: 900 VAN NEST AVE., (BOX 12) NEW YORK 62, N. Y.
CHICAGO 6 • LOS ANGELES 21
Boston • Cincinnati • Detroit • Dallas
New Orleans • St. Louis • San Francisco
Florasynth Labs. (Canada Ltd.) • Montreal, Toronto, Vancouver, Winnipeg
• Agts. & Dist. in Mexico-Drogueria & Farmacia Mex. S.A., Mexico 1, D.F.
Sales Offices in Principal Foreign Countries

AHHHHHHHHhhhh...
it must be
Florasynth's
WORCESTERSHIRE
SAUCE BASE
AND
BARBECUE
SAUCE BASE

... you're cookin'. Nothing else matches it.... Only Florasynth's bases can stir your appetite so easily ... and yet so economically ... impart to your sauce an aroma and taste utterly irresistible ...
TRY A SAMPLE...

Florasynth
LABORATORIES, INC.

Check list of practical tests
for FLORASYNTH
TRUE FRUIT FLAVORS
and other natural flavors

Florasynth
LABORATORIES, INC.

The big PLUS SERVICE EXPERIENCE RESEARCH PERFORMANCE in Oakite

Mechanized method cleans 100-foot table in 10 minutes

MECHANIZED CLEANING is more profitable cleaning, as this example shows:

Stainless steel skinning tables at a fish packing plant were cleaned daily by a crew armed with brushes and powdered soap. Scrubbing the oily deposits from each hundred-foot table was a tedious, time-consuming job.

Now one man, using an Oakite Hot-Spray Unit and a solution of Oakite Composition No. 20, gets this same table shining bright in just *10 minutes!* What's more, the unit is doing a wonderful job cleaning floors, walls and canning equipment.

The big PLUS in Oakite

Working with Oakite is like adding the services of a consulting sanitation engineer. It brings you the latest information on modern cleaning methods . . . time–and money-saving equipment . . . results of continuing research . . . a vast background of experience . . . materials guaranteed to perform. Ask your local Oakite man for a demonstration. Or, write for Bulletin F-9414. Oakite Products, Inc., 26G Rector Street, New York 6, N. Y.

OAKITE SCIENCE

50 1909-1959 years' leadership in industrial cleaning

Technical Service Representatives in Principal Cities of U. S. and Canada

purchases. Canned foods will represent $3.66 billion of total store sales this year.

The decade of the 1960's will see an increasing demand for foods with built-in leisure time. This increase will be influenced by more disposable income and socio-economic changes. As a result, there will be a significant decrease in the time it will take the American housewife to prepare a meal.

Research shows the average evening meal now takes about 1 hr. to prepare, and the average noon-day meal about 48 min. At the end of the next decade, these preparation times will be quite a bit lower. Everything will be done to see that the American housewife will get this reduction in preparation time.

—W. B. Murphy, president, Campbell Soup Co., Camden, N. J.

How To Sell Canned Foods

In the selling of canned foods, quality, production and effective selling cannot be separated. There is an absolute need of dependable, uniform high quality. If this need is accepted, then there are four steps to be taken in selling canned foods. They are:

1—Study various markets. Select one that is commensurate with your ability to supply your potential within that market. It must be located so that it can be economically, competitively, and speedily supplied. When you are to supply more than one market, know their peculiarities; try to understand and cater to these market requirements.

2—You must be prepared to maintain a constant supply on a year-round basis. Out-of-stock position can kill you. Shelf space is too dearly won not to maintain both space and position.

3—Competitive pricing for like quantity and quality is essential. Understand a premium price and a competitive price are not contradictory. Pricing must consider the profit for distributor and retailer. They are entitled to a fair profit for services performed for you.

4—Does the factory label attractively display your product? The label must have something about it—call it "punch" in selling—that compels the shopper to put it in the shopping cart, not back on the shelf. Her experience with the initial and each subsequent purchase must prove that the product quantity and quality has been honestly represented in both word and picture.

—Russell H. Winters, executive vice president — sales, National Can Corp., Chicago, Ill., formerly general manager of the Larsen Co., Green Bay, Wis.

Ten-count 'em

ten quality lines...one dependable source...

INDUSTRIAL GLOVES

Poly-D
Natural Rubber
Soft-Lined Latex
Unlined Latex
Soft-Lined Black Neoprene
Unlined Black Neoprene
Unlined White Neoprene
Buna-N
Compar Plastic

LINEMEN'S GLOVES

Natural Rubber
(Leather Protectors, too)

Don't shop around for gloves! Now—from ONE dependable source—you can get the gloves you need for better hand protection in any food application. Thanks to premium-quality materials and advanced design, Wil-Gard Gloves provide longer wear and greater comfort . . . give you more value for your glove dollar.

POLY-D® Disposable Gloves—Newest addition to the Wil-Gard line. Clear, flexible Polyethylene. Convenient, economical protection for many food processing operations.

See your Wil-Gard Distributor for more information.

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PROTECTION FOR THE HANDS OF INDUSTRY • SINCE 1916

WIL-GARD®

THE WILSON RUBBER COMPANY INDUSTRIAL DIVISION CANTON 6, OHIO

A Division of Becton, Dickinson and Company • Pacific Coast Warehouse: 530 Howard St., San Francisco 5, California

Changes in Canned Fruit Standards in the Wind?

U. S. fruit canners reportedly were concerned in December with what appeared a move on the part of U. S. Dept. of Agriculture to amend the voluntary standards for grades of such products. The changes would embody the addition of fill-in weights, in addition to the drained weight tables which now exist for all major canned fruit items except freestone peaches, it is alleged.

Occasion for the industry's questions about the matter was the report that USDA has invited comment on suggested fill-in weight tables from canners in leading fruit processing states. The government queries are said not to ask the canner's opinion as to the desirability of modifying the standards in this way, but simply to be concerned with the accuracy of the proposed tables.

Two aspects of the matter were commented on adversely by representative officials of canning companies.

First, USDA is said to have employed going-in weight tables on freestone peaches in its continuous inspection service in 1959. While government grades, often required today in certain types of sales, are supposedly subject to change only after adequate review with the industry and with other affected parties, in practice AMS headquarters is said to have sometimes changed the grading rules without such hearings, even in mid-season. The freestone peach action is described as such a unilateral change in the specifications.

Secondly, if such fill-in weights become a permanent part of the U. S. standards for grades, only plants using AMS continuous inspection could qualify for grade certificates, since only in such plants would there be government officials who could declare that the going-in weight was in line with the USDA tables. This would pose the threat of making continuous federal inspection mandatory for all companies wishing to sell government agencies or others demanding USDA certificates.

What You'll See At The

HAMACHEK

Exhibit

Booth No. 208

NATIONAL CANNERS CONVENTION

Bal Harbour, Florida - Jan. 17-20

- An actually operating scale model of the famous KEY Vine Feed Regulator and Durham Mechanical Hoist . . . the equipment that enables **one man** to feed **two** viners at the same time!
- As part of this operating model, the new Special Wide Steel Viner Feeder that steps up efficiency—makes feeding even easier.
- Operating model of Commercial Pneumatic Separator for automatic separation of chaff and skins from products such as peas, beans, and corn.
- Operating Diamond Precision Bulk Salt Dispenser.

In attendance will be HAMACHEK sales engineers to give you complete information and show you pictured illustrations of Hamachek Vining Equipment that increases efficiency and capacity while reducing labor costs.

Frank **HAMACHEK**
MACHINE COMPANY

Established 1880 **Kewaunee, Wisconsin**

PEA AND BEAN HULLING SPECIALISTS

Better Shipping Boxes for Frozen Turkeys

Five different types of shipping boxes for turkeys were selected for a 3,000 mile road test to find the best suited for this purpose. This performance test was made because too many varieties of containers were being used. Both containers and turkeys were damaged en route.

Five boxes were made of corrugated fibreboard but each was different in strength, size, shape or construction.

It was found that the containers with the least damage were those with a tight firm pack and string structural design. Also there was a little space between the turkeys and the tops of the boxes. The best container was the most expensive.

The second best, however, was the least expensive. Although this box was creased and scuffed during transit, the turkeys suffered no damage. The use of this box could save shippers about $240 a truckload in container costs.

—"Shipping Containers for Frozen Tom Turkeys," Agricultural Marketing Service, U. S. Dept. of Agriculture.

What Is the Scope of the Food Technologist?

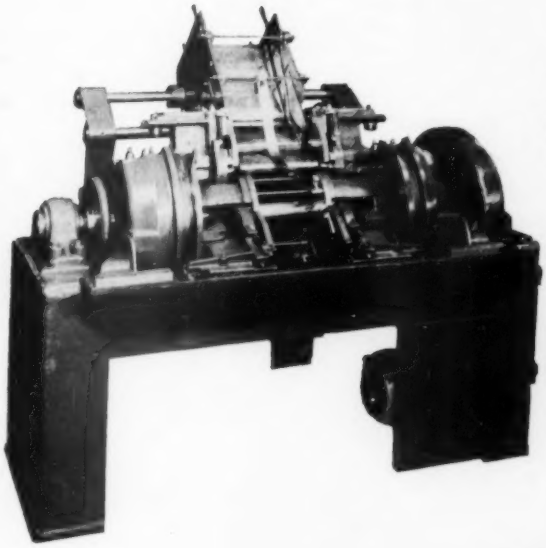
A competent food technologist in the canning industry should be able to:

1—Set up an improved quality control program.

CALLAHAN
CAN MACHINE COMPANY

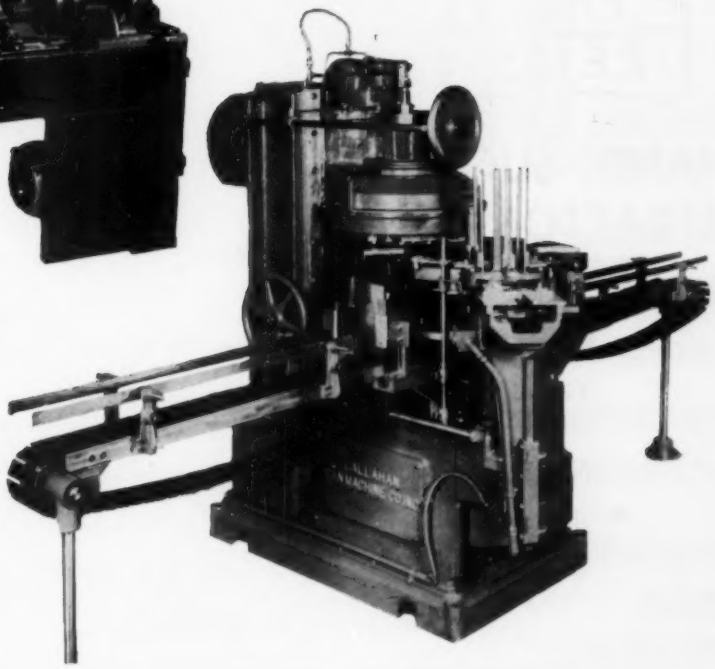
Callahan has long been one of the outstanding sources of standard and special types of automatic and semi-automatic can making machinery. New and more complete manufacturing facilities now mean even better machines, faster deliveries, lower prices. Callahan manufactures slitters, body formers, beading and flanging machines, scroll shears, seamers and all machines for every can making operation for short or long runs. Whether you need one machine or a complete canning production line, be sure you talk to Callahan first.

WRITE FOR DETAILED INFORMATION AND SPECIFICATIONS ON ANY TYPE OF CAN MAKING MACHINERY.



MODEL 1308

"CALLAHAN" THREE HEAD RECTANGULAR CAN DOUBLE END FLANGER



MODEL 11515

"CALLAHAN" SINGLE HEAD, AUTOMATIC SQUARE AND IRREGULAR CAN DOUBLE SEAMER.

CALLAHAN CAN MACHINE COMPANY

DIVISION OF VERMONT MARBLE COMPANY • PROCTOR, VERMONT

2—Make necessary laboratory determinations.

3—Lend assistance to plant engineers and sanitarian in designing new equipment.

4—Assist the plant engineers in organizing plant layout.

5—Develop new products and improve existing products.

6—Work with fieldmen to encourage the raising of canning crops and varieties most suitable for high-quality canned foods.

7—Help generally in improving the efficiency of operations and the quality of the canned foods.

—Norman Sorensen, president National Canners Assn.

Tomato Acidification Given Further Study

Addition of citric acid to tomatoes to reduce spoilage when pH runs high as proposed by Canners League of California but turned down by U. S. Food & Drug Administration—is receiving further investigation. Some conclusions recently reached are:

• Although tomato-canning districts other than California are not as aware of the problem, high pH may be a high spoilage factor in other areas as well. Natl. Canners Assn. therefore is conducting a national campaign for data, with the cooperation of state universities and other agencies. Utah, Colorado, Maryland and California so far have supplied data.

• It has been presumed that tomatoes may be becoming less and less acid, as longer bearing time, greater solid content and other factors are bred into them. Samples used in Canners League cuttings over more than 20 years do not so indicate. Instead, the pH has averaged between 4.2 and 4.3 during the entire period.

• High pH has not been found in any large part of the crop. Perhaps no more than 1% of the California harvest has been too bland in any season. Within this small fragment, however, pH has averaged perhaps 4.5, and some samples have occasionally run as high as 5.4.

• Acidity does not change with storage, it appears, NCA researchers in 1958 ran tests from a selected lot of fruit, some of which was frozen raw, some after canning, and some canned and left unfrozen. Further and more extensive experiments were conducted in the 1959 season. No evidence of change in storage was uncovered, either in firm-ripe or soft-ripe fruit.

• Soft-ripe fruit always seems to have higher pH (lower acidity) than firm-ripe.

• Natural tomato acidity is largely contributed by citric acid although a little malic and other acids may be encountered.

• If added citric acid should be permitted, the addition could be made with tablets, but this would permit only limited amounts. The best method so far devised has been that of dissolving the acid in tomato juice and then adding the latter. Acidification is proposed only to the extent that the fruit is lacking in natural acidity.

—Frank C. Lamb, Natl. Canners Assn., at Nor. Calif. IFT annual meeting, Berkeley, Calif., Dec. 3, 1959.

Men in the News

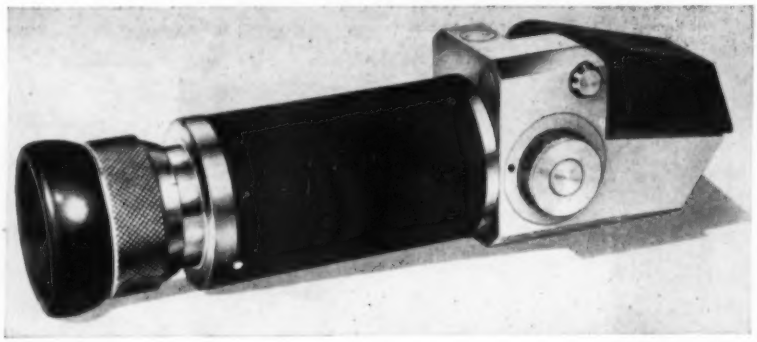
Dr. Melvin R. Johnston is head of the new Department of Food Technology at the University of Tennessee, Knoxville. Professor Johnston, formerly of the University of Missouri, is organizing faculty, courses, and curriculum for the first courses in Food Technology during 1960-61.

Dr. A. H. Robertson has retired after nearly 30 years as director of the State Food Laboratory in the New York State Dept. of Agriculture and Markets.

CARL ZEISS

HAND SUGAR REFRACTOMETER

MADE IN WEST GERMANY



A small, compact, handy instrument of great accuracy.

Two models available; one with measuring range of 0—50%, the other of 0—85% dry substance (two scales: 0—50% and 50—85%).

Measurements can be carried out by transmitted or reflected light.

Built-in thermometer 10—40° C.

Illuminating prism easily detached for cleaning.

Free detailed literature sent on request

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COMPLETE SERVICE FACILITIES

See the Emulsifying Marvel - BOOTH 117

Ballroom - Americana - Miami

CANNERS NATIONAL CONVENTION

Our display will also include a variety of tomato products that have been processed in the MINCE MASTER.

"Tomatoes Emulsified in MINCE MASTER Retain More Natural Juices - - More Natural Flavor! Make Better Catsup!"

—Reports Superior Laboratories

Griffith

THE GRIFFITH LABORATORIES, INC.

CHICAGO 9, 1415 W. 37th St.
UNION, N. J., 855 Rahway Ave.
LOS ANGELES 58, 4900 Gifford Ave.

INDUSTRY NEWS

Companies & Plants

Morris April Brothers, Bridgeton, N. J., has installed apple packing machinery in its new $250,000 controlled atmosphere storage and packing plant located in the heart of the firm's orchards. The plant will have a capacity of nearly 2 million lbs. of apples.

General Mills, Minneapolis, Minn., has acquired the business of the American Crabmeat Co., Inc., Boston, Mass., manufacturer of canned cat food.

Chun King Enterprises, Inc., Duluth, Minn., has established a Northland-CK Foods Marketing Div. to develop a national market for the firm's dessert and pie fruits and berries as well as its Italian foods and wild rice products.

Columbus Canning Co., Columbus, Miss., has been purchased for $41,600 by C. E. Forker of Danville, Ill. The dog food plant, closed because of bankruptcy, will be reopened immediately. Production will continue under the name of Jet Products, Inc.

Pillsbury Co., Minneapolis, Minn., plans to make its first capital investment outside the U.S. by building a flour mill in Maracaibo, Venezuela. The firm has also entered into a technical assistance agreement with a Guatemalan mill to produce Pillsbury brands to its specifications.

H. W. Lay and Co., Inc., Greensboro, N. C., has formally opened its new $400,000 potato chip manufacturing plant with a production capacity of 500,000 lbs. of potatoes per week. It can be expanded to accommodate a capacity of 1,000,000 lbs. per week.

Morton Foods, Inc., will construct a $250,000 food processing plant in El Paso, Texas.

Pillsbury Co., Minneapolis, Minn., will spend more than $1 million to construct a flour mill in Los Angeles, Calif. The modern mill will have pneumatic handling and bulk flour storage facilities. Production will begin the fall of 1960.

Winter Garden Citrus Products Coop., Winter Garden, Fla., is expanding its facilities for processing frozen orange concentrate. In addition to a new 40,000 sq. ft. sub-zero cold storage warehouse, the firm is adding a new 40,000 sq. ft. dry storage warehouse. The cooperative is also increasing its evaporating capacity by 22,000 lbs. which will give it a total of 96,000 lbs. of evaporation capacity per hour. The firm is planning to use this increased capacity to run their fruit when it is at its peak of maturity, rather than to increase production.

Men in the News

Professor A. C. Rice, of the University of Wisconsin, has left the University to become technical director of the newly created Apple Divisions of Seneca Grape Juice Corp., Dundee, N. Y.

C. A. McCray

W. M. Krueger

C. A. McCray has been named assistant national sales manager, Ralston Div., Ralston Purina Co., St. Louis, Mo.

Wilson M. Krueger has been promoted to general sales manager of El Chico Foods, Inc., Dallas, Texas, Mexican food processing firm.

G. D. Bartrem, director of sales, Citrus Products Div., Minute Maid Corp., Orlando, Fla., has been appointed vice president of Minute Maid International.

C. J. Ivanyi

E. S. Cabot

Charles J. Ivanyi has been appointed manager of the Institutional Div. of Realemon-Puritan Co., Chicago, Ill.

Ellsworth S. Cabot has been appointed chief industrial engineer of the

Extra Quality and Profits for
Pickle and Kraut Packers with

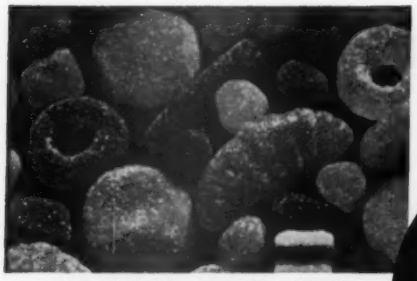
RACO LITE-KOTE KOVERS

RACO Lite-Kote Kovers are made of lightweight tear-resistant neo-nylon material. There are no hems or threads to rot or tear. Oils, greases, alkalis, and most acids will not harm the fabric. Lite-Kote Kovers can be folded when wet without developing mildew. They are free from contaminating odors. All sizes are available. Write for descriptive material and specifications. The same fabric has many industrial uses.

A proved product for outside or inside storage and processing

RACO PRODUCTS DIVISION

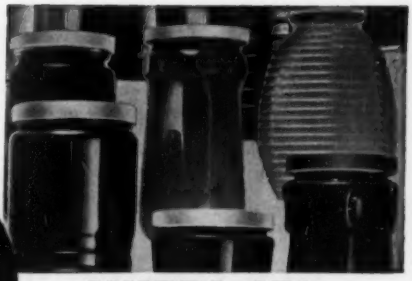
Robin W. Adair Co., Inc. Box 248, Avoca, N. Y.



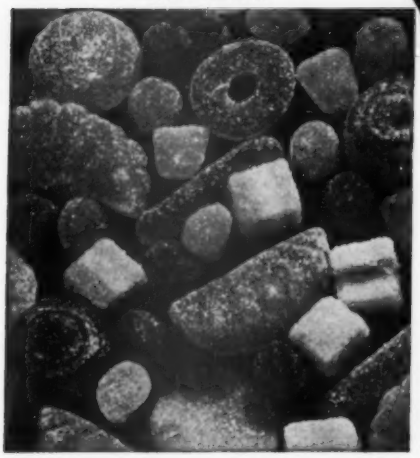
CONFECTO-JEL
Especially made for
Jellied Candies

for better product
consistency and
quality
Always Depend On

SPEAS
APPLE PECTINS
35 years



NUTRL-JEL
Regular and Slow Set
For Finest Jams, Jellies and Preserves



- Adaptable to wide range of PH levels.
- Neutral color and flavor—blends naturally with more different fruits than any other pectin.
- Gives product resiliency to avoid breakage during shipping.
- Improves spreadability of jams, jellies and preserves.
- Standardized to uniform strength so that product always has the same consistency.

Write, wire or phone for full information, technical advice, or location of nearest warehouse.

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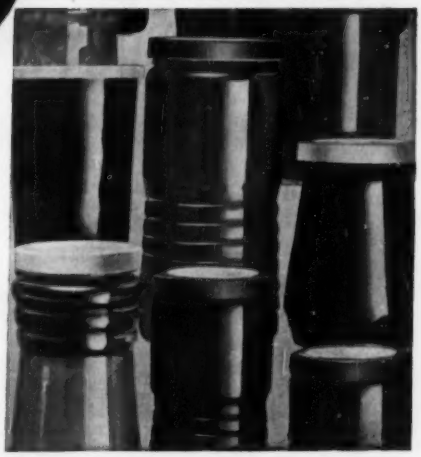
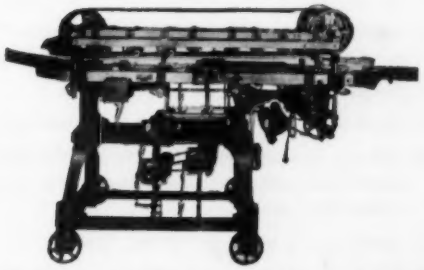
GENERAL OFFICES • KANSAS CITY 20, MO.



GEAR UP FOR THE '60's *with a* BURT NON-STOP LABELER

Burt Model AUS Non-Stop Labelers operate around the clock. The dual label feed and exclusive feed fingers keep the labels flowing smoothly . . . for faster, more efficient operation.

BURT



BURT MACHINE CO.
401 E. Oliver Street
Baltimore 2, Maryland

CRCO* "SAY SEE-AR-CO" SCORES ANOTHER EXCLUSIVE!

NEW! AMAZING PLASTIC POCKET BEAN SNIPPER CYLINDER

MODEL FHP SNIPPER
with plastic pocket cylinder, oscillating knives and hinged guard.

- No possibility of discoloration of product.
- Pockets can be replaced by "snapping in" without disassembling cylinder (Patent Pending).
- No pressure on plastic pockets.
- More wear resistant than brass or stainless steel.
- Greater snipping efficiency. Strops the knives to razor sharpness that cuts clean. Less wear on knives than metal.
- Light — two men can lift the cylinder.
- Aluminum end castings, stainless rods, ferrules and segments.

Write for complete information

THE BEST OF Everything

CHISHOLM-RYDER CO. INC.
Niagara Falls, New York
FOR THE FOOD PROCESSOR

The **Illinois State Dept. of Agriculture** has received an appropriation of $250,000 to be spent in cooperation with the University of Illinois and other state agencies for research in the marketing and utilization of agricultural products.

Frederick L. Wood has been appointed vice president and general manager of Hostess Food Products Ltd., a subsidiary of General Foods. **W. Pearce Casey** was named advertising and merchandising manager of the Birds Eye division.

Edward Aborn and **Harold F. Reindel** have been elected to the board of directors of Minute Maid Corp., Orlando, Fla. Mr. Aborn is president of Minute Maid's Tenco Div. and Mr. Reindel is a partner in a New York city law firm.

James W. Hayes has been named coordinator between the quality control and production departments, Winter Garden Citrus Products Coop., Winter Garden, Fla.

Robert E. Switek has been appointed manager of the Boston, Mass., sales branch, Libby, McNeill & Libby.

Stanley P. Pomfret has been appointed vice president of sales in charge of the Foods Div., Beech-Nut Life Savers Corp., Canajoharie, N. Y.

E. J. Hughes, formerly manager of the New York branch of Safeway Brands Buying Div. of Safeway Stores, Inc., has been named a division sales manager of Snively Groves, Inc.

Obituaries

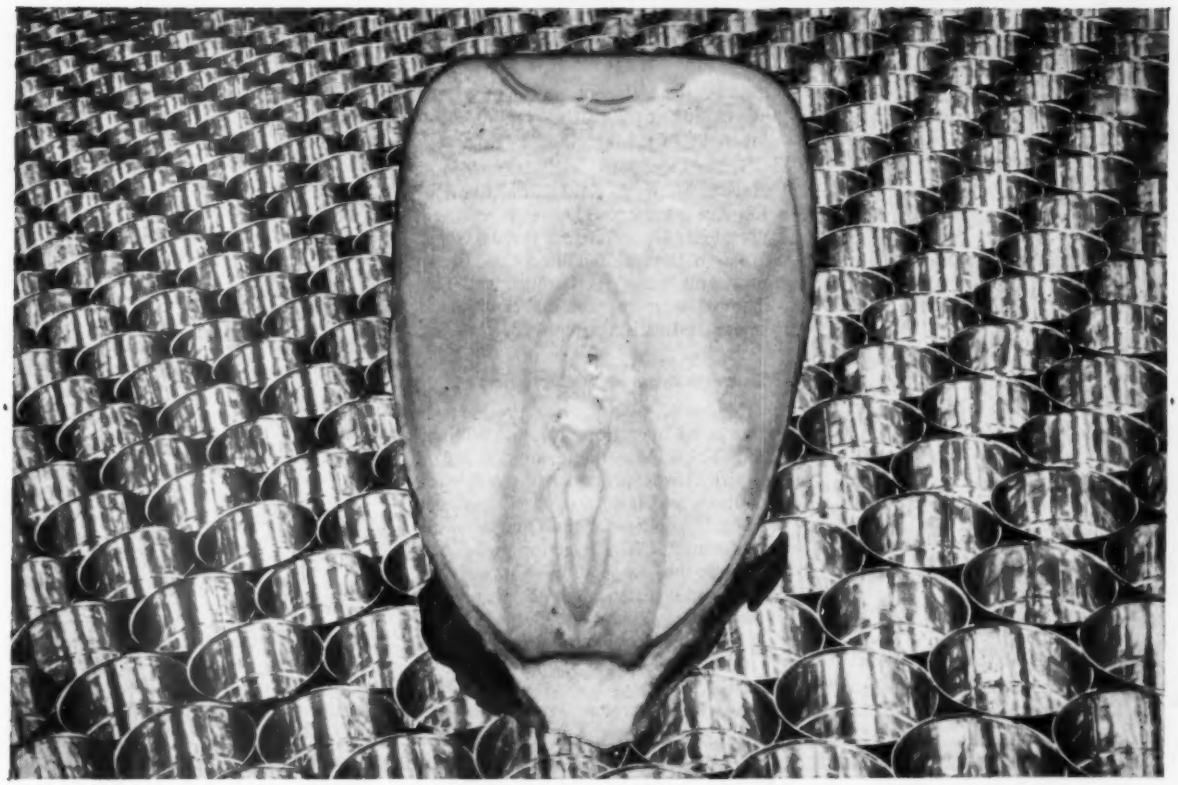
Leon A. Bohnsack, 66, of Sheboygan, salesman for Krier Preserving Co., Belgium, Wis., died recently following an extended illness. He had been with Krier for 26 years.

Charles Wesley Dunn, 74, general counsel for the Grocery Manufacturers of America, Inc., died recently at his home in Wilson Point, Conn.

Fred C. Bush, 67, one of the founders of Bush Brothers Canning Co., Dandridge, Tenn., died at his home at Chestnut Hill recently after an illness of several weeks. Mr. Bush died a few days after his brother, Alger E. Bush, vice president of the firm, died.

Harry V. Brown, Sr., 71, a pioneer in the frozen food industry, died recently at his home in Drexel Hill, Pa. Mr. Brown founded Brown's Frosted Foods in 1924 and served as its president until his death.

SPECIAL STARCHES



for Special Effects in Canned Foods

Special Starches from National simply stabilize or thicken. Nothing else! As stabilizers they never cloud color, never mask flavor. As thickeners they maintain viscosity characteristics even after extended storage. The result is these six special effects:

- Full Natural Color
- Full Flavor
- Smooth Creamy Flow
- Uniform Viscosity
- Shelf Life Stability
- Breakdown Resistance

These unusual starches are refined from corn, amioca or tapioca. They improve canned foods that range from soup to dessert. We'd like to show you how. Just write, including a description of your product or problem.

National
STARCH AND CHEMICAL CORPORATION

750 Third Avenue, New York 17 • 3641 So. Washtenaw Avenue, Chicago 32 • 735 Battery Street, San Francisco 11

ASSOCIATION ACTIVITIES

Newly Elected Association Officers

Mayonnaise & Salad Dressing Manufacturers' Association

Jerome J. Gelfand has been re-elected to serve as president of the Mayonnaise & Salad Dressing Manufacturers' Assn. The election was held at group's 26th annual convention, Oct. 31-Nov. 2, in Chicago, Ill.

J. J. Gelfand

Other officers include: 1st vice president — Wendell W. Bishop, Mrs. Clark's Foods, Des Moines, Ia.; 2nd vice president—Gordon Perry, Holsum Foods, Inc., Milwaukee, Wis.; Secretary—Richard Clements, Clements Food Products, Oklahoma City, Okla.; and treasurer—Olen C. Turner, Morton Foods, Dallas, Texas.

Iowa Food Distributors Assn.

John P. Lagomarcino, president of the Lagomarcino-Grupe Co., Burlington, Ia., was elected president of the association at the 22nd annual meeting held in Cedar Rapids, Nov. 5-7.

Other elections included: M. A. Hakes, M. & J. R. Hakes, Laurens, Ia., vice president; Thomas E. O'Brien, president, Consolidated Foods Corp., Western Div., Marshalltown, Ia., treasurer; and Ralph E. Kittinger and Dan Thomas were re-elected executive secretary and assistant secretary.

Quartermaster Association

Harry K. Werst, vice president in charge of operations for the Williamson-Dickie Manufacturing Co., Fort Worth, Texas, producer of men's work clothing and leisure apparel, has been elected president of the Quartermaster Association. The election was held during the association's annual national convention at the Statler-Hilton Hotel, New York City, Oct. 15-16.

Newly elected vice presidents include: J. J. Gallagher, chairman of the board, Hershey Chocolate Corp., Hershey, Pa.; Clarence Malan, northern division sales manager, Golden State Co., Ltd., Div. of Foremost Dairies, Oakland, Calif.; and J. H. Rutter, president, Rutter-Rex Mfg. Co., Inc., New Orleans, La.

National Pickle Packers Assn.

L. Evert Landon, president of Nalley's Inc., Tacoma, Wash., was elected president of the association during its annual convention held at the Drake Hotel, Chicago, Ill., Oct. 28-30. John Walker, secretary-treasurer of Mount Olive Pickle Co. Mount Olive, N. C., was elected vice president. William Moore remains as secretary-treasurer.

Texas Canners Association

Joe Gavito, Jr., of La Feria, was re-elected president of the Texas Canners Assn. during the annual convention held at Edinburgh, October 20. Other officers elected included T. E. Stinson of McAllen, vice president; W. L. Akin of McAllen, treasurer; and Jack Drake of Weslaco, acting executive secretary.

Wisconsin Canners Asociation

W. C. Schorer, Jr., Reedsburg Foods Corp. Reedsburg, Wis., was elected president at the association's annual

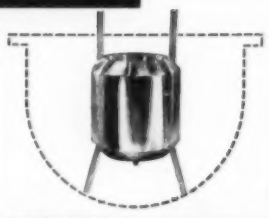
STYLE SA MIX COOKER Standard SA Mix Cooker has either single motion or double motion agitator with or without hydraulic lift. With hydraulic lift agitator lifts easily and smoothly out of cooker. Sizes range from 30 to 500 gallons.

STYLE CW MIX COOKER Large diameter gives fast even cooking. Hydraulic Lift tilts agitator smoothly and easily out of tilting kettle. Available for 40, 90, 120 pounds steam working pressure.

STYLE CW Designed to process large batches up to 150 gallons. Positive worm gear and handwheel give complete control of large capacity loads while tilting. Large diameter kettle gives fast, even cooking. Sizes from 30 to 150 gallons.

THERE IS MORE IN HAMILTON KETTLES THAN MEETS THE EYE

STYLE PC Stainless steel pressure cooking kettle, designed especially for meat and poultry processing. Balloon jacket gives increased heating capacity. Built for 90 p.s.i. in jacket and 15 p.s.i. in kettle. Has quick opening latches. Top is lifted by eccentric lever. Sizes 30 to 250 gallons.



CIRCULATOR Stainless steel steam immersion heating unit can be installed in any kettle regardless of size or shape. Gives extra heating surface at the center of kettle. Creates thermal agitation. Speeds up cooking 45%.

Hamilton Equipment Influences Profits Because Of Low Costs . . . Long Life

For Mixing and Cooking, specify Hamilton Stainless Steel Kettles. They are efficient, designed for easy cleaning, and precision-built to operate at low cost. Write for catalogue illustrating conventional and steam-jacketed kettles with or without agitators.

ESTABLISHED 1874
HAMILTON Kettles
DIVISION OF BRIGHTON CORP.
820 STATE AVENUE
CINCINNATI 4, OHIO

Do you have . . .

Food Freezing Problems?

REFER THEM TO . . .

LEWIS

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Specialists in the finest of

FOOD FREEZING SYSTEMS

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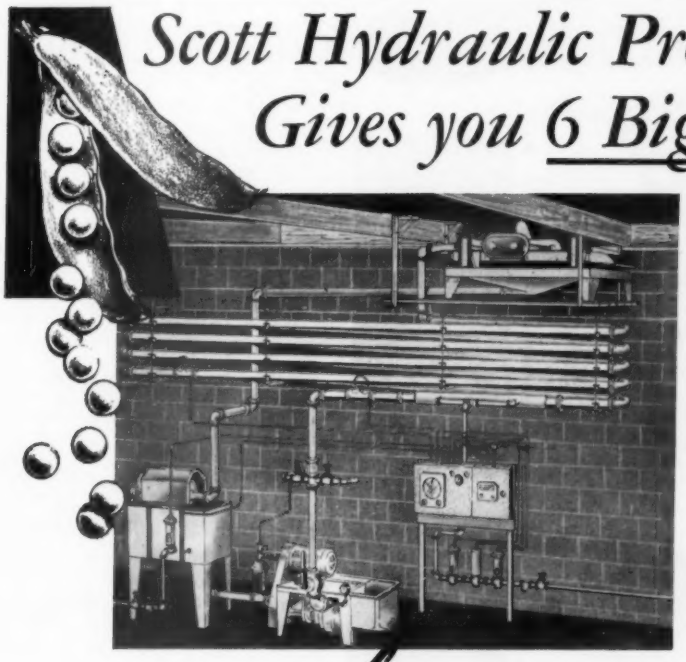
- **Loose product belt tunnels**
- **Contact plate freezers**
- **Bulk and package freezers**
- **Refrigerated warehouses**
- **Design and construction**

Scott Hydraulic Pressure Blancher Gives you 6 Big Advantages



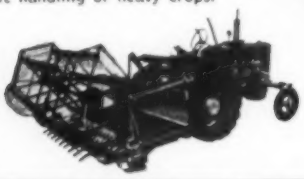
1. **SANITATION:** Easily sterilized within minutes . . . no sharp corners or cracks for foreign matter to collect.
2. **FLEXIBILITY:** May be installed anywhere . . . floors, ceilings or walls! Large capacity; any length of blanch.
3. **UNIFORM BLANCH:** Commodity immersed in blanching water at all times. Sensitive air operated control, designed exclusively for the tubular blancher maintains accurate water temperature automatically.
4. **CLEANER PRODUCT:** Product in clean, running water. Sprays give final rinse. Helps remove leaf and dirt particles.
5. **SHORTER BLANCHING TIME:** Commodity is blanched under pressure resulting in shorter blanching time, better color, flavor, quality!
6. **STEAM ECONOMY:** Blancher is totally enclosed . . . steam cannot escape; starting time reduced to minimum.

THE Scott Viner COMPANY

The Scott Hydraulic Pressure Blancher gives you the things important to economic operation and a high quality product. Time tested and approved through years of service in plants everywhere. *Write today for complete information and detailed literature.*

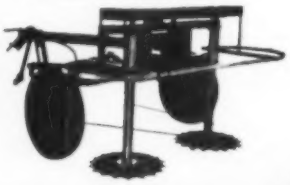
1224 KINNEAR ROAD, COLUMBUS 8, OHIO

TRACTOR-ROWERS: Cut and windrow. Heavy duty design for fast, efficient handling of heavy crops.



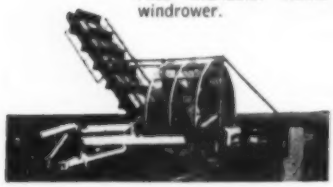
GREEN CROP LOADERS: Fast, dependable loading even under severe crop and weather conditions.

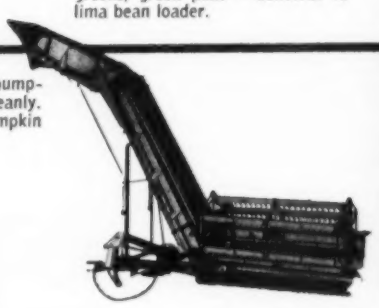
LIMA BEAN CUTTER: Cuts two rows at once, placing in single windrow. Cuts below crown, reducing pod damage. Harvests cleaner, with minimum of roots, dirt.



CUT-LODE HARVESTERS: For once-over harvesting of spinach, greens, green peas — converts to lima bean loader.

PUMPKIN LOADER: Loads pumpkins of varied sizes gently, cleanly. Also available: Hume pumpkin windrower.





PEAS?
PUMPKINS?
SPINACH?
LIMA BEANS?

HARVEST THEM BETTER WITH HUME

H. D. HUME COMPANY
Mendota Il. Illinois
BRANCHES: Hume Products Corporation
Mechanicsburg, Penna. Beaver Dam, Wisconsin

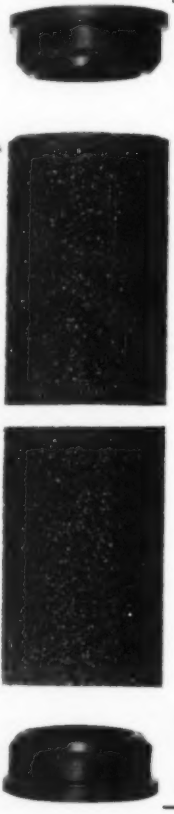
DONALD DUCK

Frozen *Citrus* Products

CONCENTRATES: Orange, Grapefruit, Limeade, Tangerine, Blended Orange and Grapefruit.

Frozen Grapefruit Sections

Florida Citrus Canners Cooperative
LAKE WALES, FLORIDA



Abrasive Coated
ASBESTOS TUBING

For continuous food peelers Abrasive coated asbestos tubing at low cost.

Replace old-fashioned ceramic segments.

Resistant to:

Shock
Breakage
Mild Acids
Heat
Water

Advantages are:

Lighter in weight per machine (27 lbs. compared to 90 lbs.)
Less wear on V belts and machine
Easy to assemble
Only 2 tubes to a shaft
Easy to clean
We use virgin silican carbide Abrasive

Your choice of
Extra coarse
Coarse
Medium
Fine
Extra fine

See us at Booth 165 in Miami

Milwaukee Motive Mfg. Co.
1825 S. Kinnickinnic Ave.
Milwaukee 4, Wis.

meeting at the Schroeder Hotel, Milwaukee, Wis., Nov. 9-10.

Other officers elected were: Donald E. Bonk, Chilton Canning Co., Chilton, Wis., vice president; Herbert Warner, Oconomowoc Canning Co., Oconomowoc, Wis., treasurer; and C. A. Sias, Friday Canning Corp., New Richmond, Wis., recording secretary.

Georgia Canners Association

C. Rouss May

C. Rouss May was elected president of the association during the group's annual meeting at the King and Prince Hotel, St. Simons Island, Ga., Nov. 16-19. Mr. May is manager of National Biscuit Company's Special Products Div. in Woodbury, Ga.

Other 1960 officers elected include: Warren McPhillips, King Pharr Canning Operations, Inc., Cullman, Ala., 1st vice president; Ernest Bloodworth, Cherokee Products Co., Haddock, Ga., 2nd vice president; and Barton Stephens of Griffin, Ga., was re-elected secretary and treasurer.

Florida Canners Association

Jerry Brown, Florida Food Products, Inc., Eustis, has been elected president of the group. The annual meeting was held in Hollywood, Fla., Oct. 29-31.

Other officers elected are: H. E. Apple, Birds Eye Div., General Foods Corp., Winter Haven, 1st vice president; Henry Cragg, 2nd vice president; Bruce Skinnger, treasurer; and C. C. Rathbun, Winter Haven, continues as executive secretary.

Midwest Preservers Association

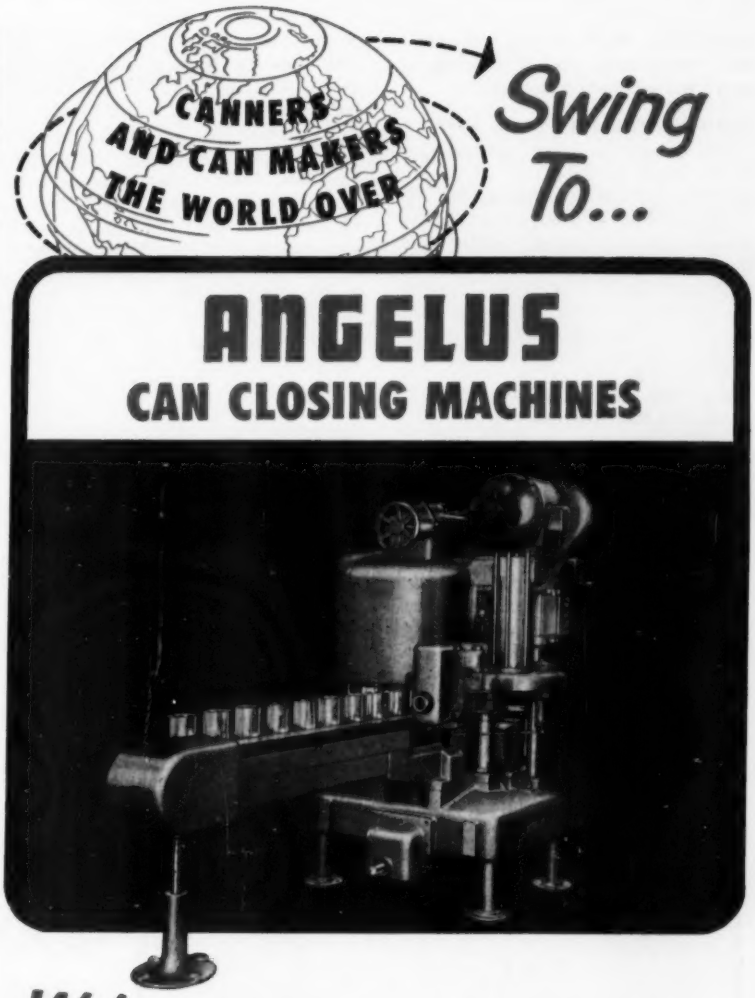
Gordon Perry, vice president, Holsum Food Products, Milwaukee, Wis., has been elected president of the association. The annual meeting was held in Chicago, Ill., Nov. 19.

Harry Gaughan, manager of manufacturing, John Sexton Co., Chicago, Ill., is vice president; Richard Fellows, general sales manager, Squire Dingee Co., Chicago, Ill., treasurer; Francis Oelerich, president, Oelerich & Berry Co., Chicago, Ill., secretary.

Pennsy. Canners Association

Jack R. Grey has been re-elected president of the canners' group. The annual meeting of the association was held in York, Nov. 23.

Other officers elected are: R. H. Pollock, H. J. Heinz Co., Chambersburg, vice president - vegetables; E. J. Nowicki, Jr., Knouse Foods Corp., Peach Glen, re-elected vice president - fruits; J. B. Park, Brandywine Mush-


CANNERS
AND CAN MAKERS
THE WORLD OVER
Swing
To...
ANGELUS
CAN CLOSING MACHINES
Welcome to Angelus Booth No. 219
Annual Canning Machinery & Suppliers Association Convention
Miami Beach—January 17-20, 1960
SINCE 1910
ANGELUS
50
YEARS OF SERVICE
On this, the occasion of our 50th anniversary, we especially invite you to visit the Angelus exhibit ... to see the characteristics of dependability of operation, economy and simplicity of maintenance, and low investment costs that influence canners and can makers the world over to swing to Angelus Can Closing Machines.
ANGELUS
Sanitary Can Machine Company

room Corp., West Chester, vice president - mushrooms; and R. M. Mears, re-elected secretary-treasurer.

Iowa-Nebraska Canners Assn.

Leo Schori, president and manager of the Elgin Canning Co., Elgin, Ia., has been elected president of the association. Elections were held during the association's annual meeting held in Marshalltown, Ia., Nov. 3.

Emery Gaard of the Pella Canning Co., Pella, Ia., is vice president, and Guy E. Pollock of Marshalltown remains as secretary-treasurer.

New York State Canners and Freezers Association

George O. Myers, Comstock Foods, Inc., Newark, N. Y., is the new president of the association. The election was held during the group's annual meeting at the Statler Hilton Hotel, Buffalo, N. Y., Dec. 3-4.

Other officers elected include: Michael E. Regan, Growers and Packers Coop. Canning Co., Inc., North Collins, N. Y., vice president; and Bernard Dawe, Gerber Products Co., Rochester, N. Y., treasurer.

National Prepared Frozen Food Processors Association

Ernest J. Schoenbrun, Sau-Sea Foods Co., Yonkers, N. Y., was elected president at the association's annual meeting held at the Sherman Hotel, Chicago, Ill., Oct. 27. The NPFFPA has its headquarters in Philadelphia, Pa.

Other officers elected were: Nat Friedson, Meat-O-Mat, Brooklyn, N. Y., 1st vice president; Robert Woods, Quaker Oats Co., Chicago, Ill., 2nd vice president; Warren Friedman, Mrs. Kornberg's Food Products Corp., North White Plains, N. Y., 3rd vice president; William Lipton, Modern Maid Food Prod., Jamaica, N. Y., secretary; Bernard Zipern, Red L Foods Corp., Great Neck, N. Y., treasurer; and Irving Rabinowitz, executive secretary.

Indiana Canners Association

P. H. Paulson

P. H. Paulson, vice president, Morgan Packing Co., Inc., Austin, Ind., was elected president of the association. The election was held by the Indiana Canners at their convention in French Lick, Ind., Nov. 19-21.

Other elections included: Kenneth W. Lucas, Indiana Packaging Co., Royal Center, Ind., vice president; and A. E. Coddington Jr., Coddintgon Packing Co., Mt. Comfort, Ind., treasurer.

Ohio Canners & Food Processors

R. A. Rice of the Gypsum Canning Co., Port Clinton, O., was elected president of the association at its 52nd annual convention held at the Netherland Hilton, Cincinnati, O., Nov. 30-Dec. 1.

Von Jones, Greenville Canning Co., Greenville, O., was elected 1st vice president; Leroy Wenger, Lake Erie Canning Co., Sandusky, O., 2nd vice president; and Wilbur A. Gould of Worthington was re-elected secretary-treasurer.

Chem. Group Names Directors

The members of the National Agricultural Chemicals Assn. elected three new members of the board of directors during the group's 26th annual meeting at the French Lick-Sheraton Hotel, French Lick, Ind., Oct. 21-23. The new members are: John A. Field, vice president—marketing, Union Carbide Chemicals Co., New York City; Paul Mayfield, vice president, Hercules Powder Co., Wilmington, Dela.; and Herbert F. Tomasek, president, Chemagro Corp., Kansas City, Mo.

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More and more food processors are learning that the name "PacRite" is a symbol of satisfaction. The field men and engineers of American Machinery are good men to have on your team. Why not talk over your ideas with us? We're specialists in improving plant efficiency and coming up with answers to tough questions.

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ORLANDO, FLORIDA, U.S.A.
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OFFICES IN PRINCIPAL CITIES

Individual Unit Former

DESCRIPTION: New aluminum package used for individual servings of jams, jellies, ice cream toppings, etc., can be formed, filled and sealed with this machine.

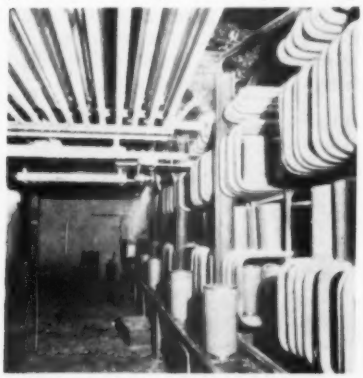
FEATURES: The containers are formed of foil that has been treated with a heat-sealable compound. They are hermetically sealed. The machine handles half-ounce and two-ounce packages.

MFR.: United Shoe Machinery Co., 140 Federal, Boston 7, Mass.

Cold Storage Conveyor

DESCRIPTION: Conveyors are unaffected by sub-zero temperatures in cold storage rooms.

FEATURES: Its sanitary construction makes it suitable for handling food products in all phases of processing.



It is of pre-fab installation at low cost.

MFR.: Mercury Industries, Inc., 365 Broadway, Hillsdale, N. J.

Poly-Coated Wrapper

DESCRIPTION: This polyethylene coated wrapper is used for packaging of frozen foods.

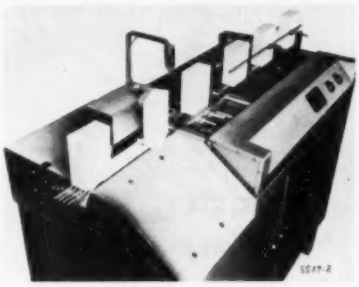
FEATURES: Overwrap is supplied in rolls and gravure printed before the coating is applied. The coating gives extra protection against excessive dehydration, gives package positive lock at freezing temperatures and heightens gloss appearance.

MFR.: Nashua Corp., Nashua, N.H.

Checkweigher

DESCRIPTION: This machine checkweighs sealed containers at speeds up to 350 per minute.

FEATURES: It rejects underweights and/or overweights. The scale is "preloaded"; individual tension adjustments set the scale for each package size to detect differences of as little as ¼% of the total package weight.

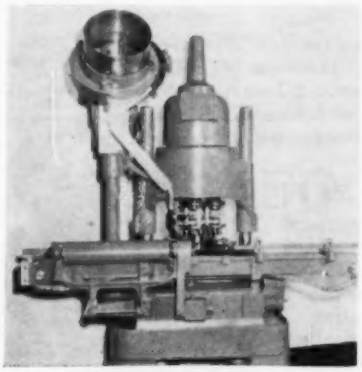


MFR.: Food Machinery and Chemical Corp., Packaging Machinery Div., 4900 Summerdale Ave., Philadelphia 24, Pa.

Closure Machine

DESCRIPTION: Machine applies aluminum closures from 11 mm to 22 mm in diameter. Trade name: Type RK.

FEATURES: Its five sealing heads can be changed for Stericap, Pilferproof or RO cap application. Depending on shape of container and type of product, the machine can cap up

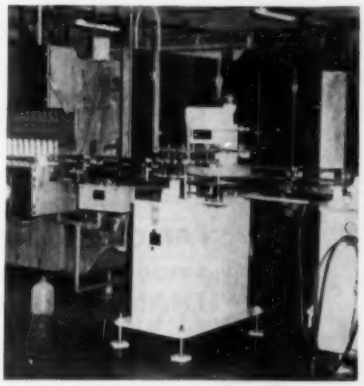


to a speed of 250 bottles per minute.

MFR.: Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa.

Inspection Unit

DESCRIPTION: Unit offers absolute control of empty bottle inspection from the bottle cleaner to the filler.



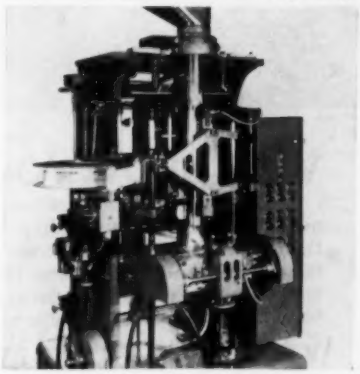
Trade name: Mark IV Electronic Bottle Inspecting Machine.

FEATURES: Vertical inspection of a bottle is possible. This machine has a scanning system that is a contrast detector; objects need not be opaque to be discovered. Translucent and transparent objects such as cellophane and glass chips can be detected. The unit has a starwheel type feeding and handling system with pockets arranged so that no bottle spacing is required.

MFR.: Geo. J. Meyer Manufacturing Co., Cudahy, Wis.

Automatic Labeler

DESCRIPTION: A head label attachment for Compak automatic packag-



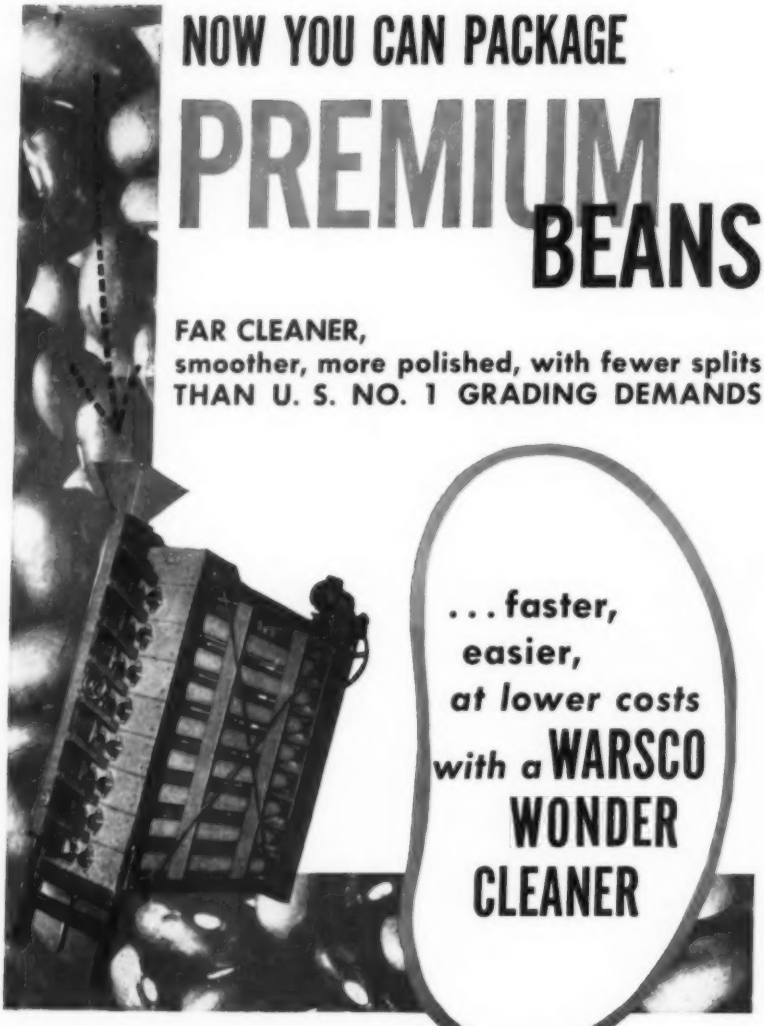
ing machines that feeds, indexes and attaches labels to formed film as it passes on the filling tube.

FEATURES: Because it is automatic, it offers a labor savings. The labeler works at the speed of the machine to which it is attached and changing of label rolls is a simple operation.

MFR.: Hayssen Manufacturing Co., N. 13th & St. Clair, Sheboygan, Wis.

Annealing Chamber

DESCRIPTION: The annealing cham-



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PREMIUM BEANS

FAR CLEANER,
smoother, more polished, with fewer splits
THAN U. S. NO. 1 GRADING DEMANDS

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easier,
at lower costs
with a WARSCO
WONDER
CLEANER

WE'LL *SHOW* YOU

... with an actual demonstration ... how the new *Warsco* is setting new standards for bean grading; how it processes beans far cleaner than U. S. No. 1 Grade specifications demand; how it can do the job faster, easier and at lower cost than ever before; how it can enable you to package premium beans at premium prices and profits! Sales-building package label available to users.

VALUABLE BOOKLET *FREE!*

Shows and explains all the fabulous features of the new Warsco Bean Cleaner... how it cleans all types and sizes of beans at the rate of 2,000 to 3,000 pounds per hour, 24 hours per day, 7 days per week, with practically no attention... how the cleaner beans actually look smoother and more polished. Write for your free copy today; no obligation.

WARSCO DIVISION

W. A. RICE COMPANY—Jerseyville, Illinois

ber technique produces tubular polyethylene film with improved clearness and gloss.

FEATURES: To obtain best results the chamber should be between 6 and 10 inches high; extruding resins should have a narrow molecular distribution. This technique is successful due to the fact that the film frost line is raised.

MFR.: U. S. Industrial Chemicals Co., 99 Park Ave., New York 16, N. Y.

Circulars, Bulletins Catalogues, Brochures

Electric Trucks—Six-page folder describes new features and specifications of the "Elpar" R-10T series of heavy duty industrial trucks—Elwell-Parker Electric Co., Cleveland, Ohio.

Steam Taps: Booklet entitled, "The B&J Steam Trap Primer," gives fundamental facts on condensate drainage, and all types of steam traps—"Primer," Barnes & Jones, Inc., 34 Crafts St., Newtonville 60, Mass.

Seals & Fasteners: 16-page catalog (No. 359A) illustrates and describes the entire line of high-pressure, vibration-resistant seals and fasteners—A.P.M. Corp., 252 Hawthorne Ave., Yonkers, N. Y.

Stapler: Describes important design features of the new Paslode Model PR Air-Power Stapler and others — Paslode Co., 5860 Northwest Highway, Chicago 31, Ill.

Water Softening: Booklet entitled "Sodium Zeolite Softeners" describes the process and gives information on selecting and sizing of equipment—Cochrane Corp., 17th St. Below Allegheny Ave., Philadelphia 32, Pa.

Elevating Forks: Brochure MH522 gives complete data on how to use low-mast lift trucks, including photographs and prices — Little Giant Products, Inc., 1530-50 N.E. Adams St., Peoria, Ill.

Flow Indicator & Alarm: Design Specification Sheet #DS-130-1 describes a new, low cost flow indicator and alarm for purge type service—Brooks Rotameter Co., Hatfield, Pa.

Steel Hoppers: Bulletin No. 265 describes cost-saving advantages of self-dumping steel hoppers for bulk material handling — Roura Iron Works, Inc., 1402A Woodland Ave., Detroit, Mich.

Vibration Inducers: 38-page catalog provides engineering data, specifications and a price list on the "Vibrólator" line of vibration inducers—Martin Engineering Works, Neponset, Ill.

How Drosophilia Fly Is Controlled in the Field

Studies made by Natl. Canners Assn. technicians this past season show that the Drosophilia fly—a pest particularly to tomato processors—can only be controlled in the field. There must also be good factory practices in storage, washing, etc., but unless suitable measures are taken in the growing areas, these latter efforts will be inadequate.

Suggestions for field control made by NCA scientists include the following:

1. Grow the newer crack-resistant varieties. They are much less susceptible to contamination by fly eggs. In addition, they may have better yield, better quality generally.

2. Make regular checks of the fly population, to find out when to take counter-measures. One effective procedure is the split-tomato method. A slice is cut off of each side of several tomatoes, and then these fruits are left in the field overnight. The next day they are cut apart and examined under the microscope for the presence of fly eggs.

3. Most of the eggs are deposited between picking and washing. One packer with a bad fly problem was able to eliminate most of the egg contamination by dusting the hampers used to transport the raw product from field to plant. He supplied his pickers with 92c dusters, which sprayed pyrethrum dust on the hampers when the latter were half full, and again when they were completely loaded. The cost of the insecticide, which is also a repellant, was $1 to $1.20 per ton.

4. Great care should be taken in the use of insecticides. They should be obtained from reliable suppliers. Pyrethrum should be in a dust form with 0.1% stabilized material. It should not be held too long, since its effectiveness weakens with age. Only approved insecticides and herbicides should be used, and they should not be applied later in the season than suppliers or government agencies feel is safe.

—Dr. Charles H. Mahoney, director of NCA Raw Products Research Bureau at New York State Canners and Freezers Convention.

Weed Control Treatments Show Little Difference

A recent study has been conducted to determine the effectiveness of the chemicals used to control weed and grass growth in spinach lots. Weed control has been a big problem in spinach production.

It was found that there was a definite reduction in the spinach yield with the use of two treatments—6 lbs. of CEDC per acre and 6 lbs. of EPTAM per acre. Using lesser concentrations of these chemicals produced, an increase in spinach yields at the 5% level. Of all the treatments used, three lbs. of CEDC per acre proved to be the outstanding one.

All of the treatments reduced the weight of weeds per acre to a degree. There were no significant differences among them. Therefore, it is apparent that none of the treatments controlled grasses because there were no significant differences among treatments.

—Studies of Chemical Weed Control in Spinach by W. R. Kays and Charles Galeotti, Dept. of Horticulture, Oklahoma State University.

New Chemical Produces Short, Stocky Plants

A chemical which regulates the growth of plants has been discovered. It is called CCC, short for 2-Chloreth hyl Trimethylannonium chloride. The chemical was an outgrowth of basic work being done on choline compounds in plants.

Plants treated with CCC will grow short and stocky. CCC treatments will also influence the flowering of certain plants and the yield of some crops. These changes in growth may be influential in the growing and harvesting of crops, particularly by mechanical harvesting.

The effect from using CCC is directly opposite that of gibberellin, another type of growth stimulator. Gibberellin induces tall and elongated growth of plants. The two chemicals are mutually antagonistic; that is one chemical will offset and reverse the response brought about by the other.

A more complete control of plant growth may be obtained by teaming the two. It may be possible to time treatments so the advantages of both could be had.

—Dr. N. E. Tolbert, professor in agricultural chemistry, Michigan State University, in Seed World.

Fertilizer Usage: Farmer Relies on Representative

California farmers have indicated that fertilizer company representatives were their main source of information in determining their fertilizer practices. Almost three-fifths, or 60%, of the farmers listed fertilizer fieldmen as their primary source of information. Farm advisors were the sources of two-fifths of the farmers.

The report covers a survey of farmers and a total of 81 agency representatives serving farmers in two California counties. The object of the study was to determine who helps the farmer the most in the use of fertilizer.

—How Fertilizer Dealers Affect Fertilizer Use, Luverne Donker, Douglas Kleist, and Dr. Orville Thompson, Dept. of Education, University of California. Study sponsored by Natl. Plant Food Inst. of San Francisco.

. . . see the Young Carton Printer IN

BOOTH No. 166

AT THE 1960 CANNERS SHOW

AMERICANA HOTEL, BAL HARBOUR, FLORIDA

JANUARY 17 - 20

PLUS A COMPLETE LINE OF SHIPPING ROOM SUPPLIES AND THE NEW ROL-IT-ON ROLLER STENCIL PROCESS BY

DIAGRAPH-BRADLEY INDUSTRIES Inc.

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DISTRIBUTORS IN ALL PRINCIPAL CITIES

D.B.

NEW PRODUCTS AND PACKAGES

Instant Dip Mix

Bel-Air Food Products, Los Angeles, Calif., is distributing nationally two new Instant Dip Mixes—Onion and Pizza flavors. They are cousins to the firm's Dip Stix, a French-toasted bread stix introduced in 1957. The

new flavors are packaged in pouches of (3½" by 5") special "Milseal" lamination of acetate, foil and pouch paper supplied by Milprint, Inc., Milwaukee, Wis.

Baby Food

Heinz Baby Foods, Pittsburgh, Pa., is introducing a new beverage—Strained Pineapple Juice. This new juice variety brings to seven the number of juices processed for babies by Heinz. Fortified with vitamin C, it is packed in 4½ oz. tins, 24 tins to the case. The juice is packed in Hawaii and homogenized for easy flow through nursing bottle nipples.

Egg Rolls

Golden Palace Food Products, Inc., New York City, is introducing Jumbo Egg Rolls in heat-and-serve gold-tinted aluminum foil trays. The cover, which

is lithographed by Milprint, Inc., Milwaukee, Wis., illustrates the product retailing at about 39c.

as it appears whole and also shows a cross section of one roll.

Dessert Mixes

Pillsbury Co., Minneapolis, Minn., has introduced three new dessert mixes. They are Lemon Chiffon Float Mix, Chocolate Boston Cream Pie and Vanilla Boston Cream Pie. They were created for the specialty dessert mar-

ket. Each package contains pouches of cake mix, filling and icing. They are

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Despite Their Lower Cost

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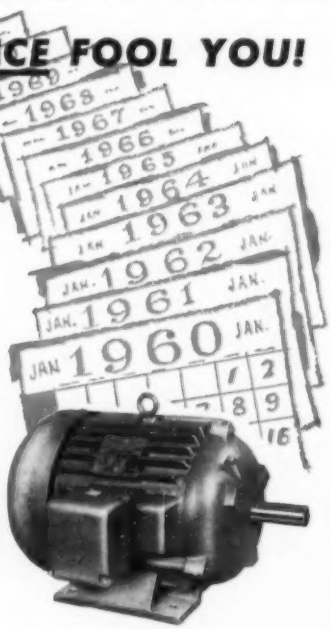
Give Outstanding Service

Anybody who knows motors will recognize that there is no finer motor than the Brook. These motors have established excellent service records in industry. Yet, they actually **cost less!**

Space age production methods and extensive distribution in 76 countries makes possible this better motor at lower cost. All standard enclosures. 1 to 600 H.P. Start saving now —look into Brook Motors at once. Write for literature and name of your dealer.



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world's most respected motor

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Factory Representatives, Warehouses, Dealers, Service Stations, in Major Cities

In Canada: Brook Electric Motors of Canada Ltd., 250 University Ave., Toronto, Ont.

Sauce with Meat Balls

Buitoni Foods Crop., South Hackensack, N. J., is introducing nationally a heat-and-serve Sauce with Meat

Balls. The sauce contains 8 meat balls and its net weight is 15 3/4 oz. Cooking instructions appear on the label. Average retail price is 45c.

Fruit Bases

Dairy Service Div., Kraft Foods, Chicago, Ill., is introducing three new fruit bases—grape, orange and lemon. All three are packaged in 3 qt. tins. The grape base contains 9% grape juice; orange base, 11.8% orange juice; and lemon base, 12% lemon

juice. Detailed mixing instructions are printed on the label of each can.

New Package Briefs

Fish & Chips Overwrap: Booth Fisheries Corp., Chicago, Ill., is using a new overwrap with a full-color vignette for its Booth brand Fish and Chips. Package was designed and printed by Western-Waxide Div., Crown Zellerback Corp., San Leandro, Calif.

Foil Overwrap for Meat: L. B. Darling Co., Inc., Worcester, Mass., is using foil carton overwraps by Milprint, Inc., Milwaukee, Wis., for its frozen meat products.

Beef Vacuum Pouch: Armour & Co., Chicago, Ill., is using a pouch of three-ply lamination of cellophane-foil-polyethylene on the front, and of a two-ply lamination of cellophane-polyethylene on the back for its dried beef. The pouches are designed by Associated Designers, Chicago, Ill., and produced by Milprint, Inc., Milwaukee, Wis.

Tray-Pack for Fillings: Sokol & Co., Chicago, Ill., is using a new corrugated case design for its line of Solo pastry and cake fillings. The new design, by Stone Container Corp., Chicago, Ill., features printing that serves as a cutting guide for opening the case. A tray with a shelf sign is left when the top is removed.

Modern Overwrap for Seafood: British Columbia Packers Ltd., Vancouver, Canada, is packaging its full line of seafood products in new overwraps with a modern design.

Dog Food in Paper Bags: Best Foods & Farm Supplies, Inc., Oakdale, Pa., is using a "horizontal-vertical" paper bag to package its Joy dog food. One side of the bag is printed for reading when it's standing; the other for reading when the bag lies on its side.

New Trademark: Wm. Underwood Co., Watertown, Mass., has redesigned its Red Devil trademark. The old trademark pictured a standing figure with outstretched arms; the new one is a dancing Red Devil, waving gayly.

Onion in Institutional Can: R. T. French Co., Rochester, N. Y., is packaging its Instant Minced Onion in 3 lb. cans for institutional use.

Multicartons for Sardines: Royal River Packing Co., Yarmouth, Me., is using multicartons, designed and manufactured by Container Corp. of America, Chicago, Ill., to sell Royal River sardines in a test market. The three pack proved more popular than the 4 or 6 packs.

Monitor
REGISTERED TRADE-MARK

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PEAS—LIMA BEANS—TOMATOES—STRING BEANS

APPLES—CHERRIES—BERRIES—ETC.

Manufacturers of the Famous

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WHIRLPOOL BLANCHER
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The features in Berlin Chapman 12' and 6' model Shaker Graders are new... adding to the outstanding performance that results in high capacity . . a compact unit . . . available in any number of decks from three to six. Because of its compact design it saves floor space over any other conventional type graders.

HIGH CAPACITY
RAPID CHANGE-OVER
QUICK WASH-OUT
MINIMUM COST

Designed for high capacity, rapid change over, and quick washout with minimum cost, Berlin Chapman Shaker Grader is as nearly 100% accurate as is possible to produce on a grader . . its simplicity of construction with as few parts as possible makes for easy cleaning after each day's run, or during cleanup period . . . every part available for thorough cleaning which requires minutes instead of hours. It has squeegee cleaning action of rubber wipers . . made to handle high capacities of raw peas or other similar vegetables.

Write today for complete details . . . quotations will be furnished upon request. Also ask for complete catalog on BERLIN CHAPMAN Food Processing Machinery.

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1079 Lombard St., San Francisco 9, Calif. Tel: Prospect 6-1415

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FOR SALE—Complete Blackeye pea line as follows: 2 Chisholm Ryder All Steel Viners, complete with chain conveyors, elevators, belt drive, with 46 HP gasoline engine; 2 Goulds centrifugal pumps with 4" intake and 4" discharge belt driven; 1 12 ft. hot water blancher complete with reduction gear; 1 Sinclair Scott Rod Washer RW 619; 1 pea holding hopper; Ayars 5 Pocket Filler with change parts for #303 and #2 cans; 2 Dewatering Reels; 2 Wolfinger Beet Slicers. L. H. Moore Canning Company, McAllen, Texas.

FOR SALE
SURPLUS EQUIPMENT FROM WELL-MAINTAINED PLANT

1—Pitco—24" x 34"—Model 47V Fryer—For nuts or donuts $300.00
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1—Pneumatic scale 2 Head Screw Capper—58 MM. chuck—60/min. $3400.00
1—Pneumatic scale Bottle Cleaner "AIBC"—For glass & tin—79/min. $2200.00
1—Pneumatic scale Hi-Speed 4 Head Net Weigher, 50 to 60/min. $4500.00
1—Weigh-Rite Semi-Automatic Net Weigher—1½ oz. to 1 lb. $500.00
1—Weigh-Rite Semi-Automatic Net Weigher—4 oz. to 3 lbs. $500.00
1—Jabez Burns—3 Bag Roaster without Motor. Price $200.00
5—Jabez Burns—Cooling Carriage on Rails with Exhaust & Blower $700.00
1—Honan Crane Oil Filter $65.00
1—Richards Auto. Bulk Scale—to 30 lbs. $35.00
1—Fosberg Gravity Stoner — For nuts, beans — coffee $150.00
1—Toledo Floor Scale $800.00

SUBJECT TO PRIOR SALE. JOHN W. LEAVITT COMPANY, 195 State Street, Boston, Massachusetts.

FOR SALE — FMC Stainless Crusher-Preheater, Standard Knapp #429 Top Gluer. Fitzpatrick st. st. Comminuting Machines models D & F. 3,000, 3,700 gallon stainless steel Vacuum Tanks with coils. Niagara Stainless Steel Pressure Leaf Filters: 500, 100 sq. ft. Hope Piston Filler. SEND US YOUR INQUIRIES. PERRY EQUIPMENT CORP., 1405 N. 6th St., Phila. 22, Pa.

For Sale—Twenty-three aluminum jacketed kettles from 50 to 200 gallons. Price sixty cents per gallon. H. L. Triestram, 1603 Nazareth Road, Kalamazoo, Mich.

FOR SALE—Industrial wood skids 189—3'x5'x11" high. 21—4'x6'x11" high. $2.75 each. Croswell Pickle Company, Croswell, Michigan.

FOR SALE: Continental 318-PDS-2 Closing Machine for 603-700 Cans. Cascade Food Products, Salem, Oregon.

FOR SALE—Kettles, Tanks, Fillers, Filters, Labelers, Pumps, Mixers, Case Gluers and Sealers, Vacuum Pans, etc. Send us your inquiries and list of idle equipment. Loeb Equipment Supply Co., 830 W. Superior St., Chicago 22, Ill.

For Sale—Full stock of carton sealing machines: Ferguson Model D, ABC Model XSA, ABC Model XSSA, all in very good condition.
Kettles: Groen 125 gal. shallow type all SS, 90 P.S.I.: Pfaudler 100 gal. cap. all SS except for mild steel jacket, 90 PSI. working pressure; Lee pressure cooker all SS 75 gal. work. cap., jacketed for 90 P.S.I. and 15# internal working pressure. Filling machines: Stokes & Smith Model G1, all SS complete with vacuum head; Elgin 32 ounce cap. SS single cylinder.
Tanks: 4—12,000 gal. SS lined; 4—4,500 gal. cap. SS lined tanks.
Carton sealers, grinders, fillers, labelers, mixers, pulverizers in stock. Send your inquiry to
Aaron Equipment Company 9370 Byron Street
Gladstone 5-1500 Schiller Park, Ill.

Your FIRST source for Good FOOD EQUIPMENT! Extensive, Varied Stock, Complete Plants Still Set Up. Rental—Purchase Plan. Dryers, Evaporators, Crystallizers, Stills, Columns, Centrifugals. Filters; Presses, Disc, & Leaf types.
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WANTED MACHINERY

WANTED—Corrugated Boxes, Folding paper boxes, cellophane bags and rolls and any other discontinued packaging material for sale. Berry Box Co., Inc., 1013 Broadway, Brooklyn 21, N. Y.

Top and bottom sealer and compression unit to handle 48 one-pound cans. S. E. Mighton Co., Bedford, Ohio.

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PLANT SUPERINTENDENT for California Pickle Plant. Wonderful opportunity for skilled manager to start in a new, modern facility. Replies confidential. Please give full information in first letter, stating past positions and salaries earned. Reply Box 3119, c/o Canner/Packer.

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MAINTENANCE FOREMAN—Resourceful, qualified mechanic experienced in maintaining flexible film baggers, wrapping machines, conveyors, etc., similar to those used in the vegetable canning and freezing industries. Eastern location. Good salary. Write giving background and experience to Box 2160.

WANTED—Executive Assistant and Sales Manager, experienced with automatic labelers, casers and other filled can and glass handling equipment by eastern manufacture. Salary Open. Give complete details of past experience and salary expected. Reply to Box 9160.

POSITIONS WANTED

FOOD CHEMIST with extensive experience in manufacture, development, control and cost reduction of canned foods, dressings, pickles, syrups, meats, desires a position of responsibility. Box 6160, Canner/Packer.

For food processor needing technical production supervision Food Technologist offers substantial record-cutting costs, increasing yields, quality control, equipment improvement and savings in the thousands. Excellent merchandising background also. Box 7160, Canner/Packer.

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BUSINESS OPPORTUNITY IN FRUIT PROCESSING IN HAWAII. Wanted: Business executive to invest in small frozen fruit processing corporation and to actively participate in management. Ability in sales management essential in order to develop mainland market. Expansion into hot-pack lines of tropical fruit possible. Large growth potential. Plant located in Honolulu, Hawaii. Write Box 1129.

Wanted—Aggressive Food Broker or Company to represent established company with complete quality line of Pickles and Relishes in New England States. Box 4160.

HAVE NATIONAL DISTRIBUTION AVAILABLE! If you can use capital and successful marketing manpower, we are interested in your product. Write giving full particulars. Box #8160.

FOR SALE—Modern Cannery, well situated headwaters Chesapeake Bay adjoining fertile Pennsylvania between Route 1 and 40 midway Philadelphia, Baltimore. Three-car PRR siding. Equipped for 8 oz. #1, 303 and/or 12 oz. Vacuum Whole Kernel Corn. (2 lines). Capacity 400 c/s PH—100,000 c/s season. 80,000 c/s #303 storage. (12,000 sq. ft.) Splendid water, ample white non-union labor. Low freight and taxes. Storage in transit privileges. Excellent growing area—peas, beans, corn, tomatoes, mushrooms. Substantial tax-loss saving—convenient terms. Substantial additional space if adapted warehousing or distribution center. Contact F. S. Silver, Agent, Colora, Maryland.

PACKING HOUSE-Freezer Plant, 6,600 ft., 7 acres, 450 lockers, 1958 sales $150,000, Pa. town; with property. Write Box 5160.

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By order of X.W.C. Co., Inc., owners of the described property at Marion, N. Y., plant formerly owned by

WAYNE COUNTY PRODUCE CO., INC.

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on

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34 MILL ST. MARION, N. Y.

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Will be offered free and clear of liens; first in bulk, then units and piecemeal or lots.

Real Estate: Consisting of 5 acres land. Office Bldg. 16′ x 24′. Storage Tank Bldg. 36′ x 84′. Factory & Warehouse Bldg. 60 x 260′ with private railroad siding. Can be adapted for canning, freezing foods or storage.

Machinery and Equipment Consisting of:

A.P.V. 25 plate stainless steel pasteurizer, complete with pump, tank, controls & gauges. Velatron Type SMPR2 bottle preheater, 220 v. M.R.M. #2594 20 spout st. st. automatic vacuum filling machine, complete with motors, pump for 12 oz.-pts.-qts.-½ gal. & gallons.

Island Equipment 60′ x 4′ cooling tank complete with 4 pumps, conveyor, motors. Built in 5-12′ sections.

Island Equip. infeed conveyor, motorized.

2 - Island 3½′ & 4′ dia. accumulator tables.

2 - Island 20′ & 60′ canvas & rubber belt conveyors, motorized.

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Resina Mod. RU screw capper for 28 & 38 m/m caps with conveyor belt.

MRM Mod. CM automatic labeler with S.S. conveyor for 12 oz.-pts.-qts. ½ gal-gallons.

ABC automatic case sealer for pts.-qts.-½ gal.-gallons, motorized.

ABC 24′ case compression sealer.

Gee-Vee 70′ alum. 10″ skate wheel conveyor.

2 - KEWANEE SCOTCH 110 H.P. STEAM BOILERS WITH IRON FIREMAN PUMPS, CONTROLS WITH 12,000 GAL. CAP. OIL STORAGE TANK.

The complete, modern and fully automatic cider & vinegar bottling line, Steam Boilers, etc., was purchased and installed new in 1957. This is one of the most modern lines in the East.

3 - Monarch cider presses, 18″ ram with pumps, motorized.

Liquid Model LH, Size SLT automatic labeler, motorized.

2 - Republic & Shriver filters.

2 - 60,000 gal. cap. fir storage tanks.

3 - Pfaudler glass lined 850 gal. cap. storage tanks.

American Seitz Mod. A filter, 1500 gal. per hour cap. with pumps, motorized.

Queen City grinder, 20 H. P. motor.

8 - storage tanks, 18,450-42,000 gal. cap.

9 - storage tanks, 1000 to 6000 gal. cap.

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1957 - Mack Thermodyne Mod. B-61 Deisel Truck Tractor.

1954 - Mack Thermodyne Mod. B-60 Truck Tractor.

1954 - Ford Mod. F-900 Truck Tractor.

1953 Heil 4065 gal. cap. Tank Trailer, single axle.

2 - 1951 Fruehauf Mod. FW 64180, 32′ st. st. semi-van trailers, dbl. axle.

2 - 1950 Fruehauf Mod. FW 61656, 61661 32′ st. st. semi-van trailers, dbl. axle.

1957 - Ford Mod. F600, 1½ ton stake body truck.

1937 - Ford dump truck.

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Press carts, press racks, conveyors, pallets, filter sheets, press cloths, shop trucks, lift trucks, mixers, pumps, motors, pipe tools, scales, time clocks, etc.

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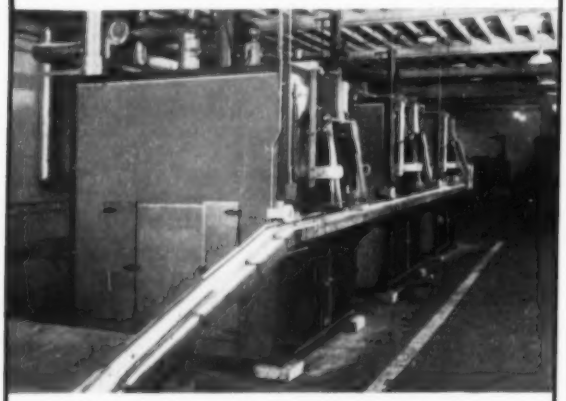

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Load, freeze and unload directly from the overwrap machine. Your products immediately commence freezing with double contact and under pressure; then automatically discharged for casing. The freezers are portable for change in plant location or floor plans. Here is the utmost in automation for the fastest, finest, economical freezing of consumer and institutional packages.

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"Manually" Operated Double Contact Pressure Plate Freezers

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"Semi-Automatic" Double Contact Pressure Plate Freezers for Your Trayed-up Products.

REMARKABLE QUICK FREEZING

Featured by all Amerio Freezers means that ice crystals are too small to break cell walls. This insures that quality and flavor will not be lost in defrosting. And—hydraulically controlled plates assure flat, uniform packages for eye appeal and easy stacking.

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"It's the Contacts that Count"

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NAILED WOODEN PICKING BOXES

Designed for Mid-Western Requirements

- RIGID CONSTRUCTION
- PALLET HANDLING
- AUTOMATIC DUMPING
- LONG LIFE SPAN
- HOLDS 36 LBS.
- LESS SHRINKAGE
- MORE VENTILATION

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Monadnock Bldg. San Francisco 5, Calif.

20 CANS A MINUTE... *opened, drained and rinsed!*

The new Langsenkamp "101" Can Opener is completely automatic . . . does the work of four men. Depending on the product's consistency, it can open, drain and rinse up to 20 No. 10's a minute. Positively eliminates the chance of can slivers getting into your product.

Ideal for canners, frozen food processors, bakers, or any users of liquid or semi-paste product . . . for any product that will drain through a 4" opening. Provides cleaner, more efficient handling—no loss due to spilling or splashing of product. Equipped with stainless steel underpan 60" x 20" x 15" wide, ¾ hp motor, 806 lbs. net weight, pump optional.

The "101" Automatic Can Opener is one of a complete line of Langsenkamp machines for food processors which also includes manually-operated can openers and automatic can crushers. Write for full details.

F. H. LANGSENKAMP CO.
227 E. SOUTH ST. • INDIANAPOLIS 4, INDIANA

COMING EVENTS CALENDAR

January

4-6—**Northwest Canners' & Freezers' Assn.**, annual convention, Olympic Hotel, Seattle, Wash.

5-10—**America Rack Merchandisers Institute**, Sheraton Hotel, Chicago, Ill.

6-8—**Illinois Canners School**, U. of I., Urbana-Lincoln Hotel, Urbana, Ill.

7-8—**Canners League of Calif.**, 37th annual Fruit & Vegetable Sample Cuttings, Fairmont Hotel, San Francisco.

10-14—**Potato Chip Institute International**, 23rd annual conference, Netherland-Hilton Hotel, Cincinnati, Ohio.

11-12—**Michigan Processors Raw Products Conference**, Michigan State University, East Lansing, Mich.

15—**National Pickle Packers Assn.**, board of directors meeting, Kenilworth Hotel, Miami Beach, Fla.

16-24—**Florida Citrus Commission**, exposition, Winter Haven, Fla.

17-19—**National Preservers Assn.**, annual convention, Deauville Hotel, Miami Beach, Fla.

18-23—**National Canners Assn. — Canning Machinery & Supplies Assn.**, annual convention & exhibit, Hotel Americana, Miami Beach, Fla.

19—**Can Manufacturers Institute**, quarterly board of governors meeting, Bal Harbour, Fla.

19-21—**National Macaroni Manufacturers Assn.**, winter meeting, Diplomat West, Hollywood, Fla.

21-23—**National Macaroni Manufacturers Assn., 56th** annual meeting, Edgewater Beach Hotel, Chicago, Ill.

25-27—**Assn. of Institutional Distributors**, annual convention, Riviera Hotel, Las Vegas, Nev.

25-29—**1960 New Jersey Farmers Week**, Trenton, N. J.

28-29—**Refrigeration Research Foundation**, 2nd regional educational seminar, La Salle Hotel, Chicago, Ill.

28-30 — **National Institute of Oilseed Products**, annual convention, Ojai Valley Inn, Ojai, Calif.

February

8-10—**Western Frozen Food Processors Assn.**, 16th annual meeting. Mark Thomas' Inn, Monterey, Calif.

8-10—**5th Military-Industry Packaging and Materials** Handling Symposium, Sheraton Park Hotel, Washington, D. C.

9-10—**Fruit and Vegetable Processors**, annual conference, Fort Hayes Hotel, Columbus, Ohio.

9-11—**Wisconsin Canners Assn.**, Raw Products Conference, Wisconsin Center Bldg., Madison, Wis.

18—**National Red Cherry Institute**, 28th annual National Cherry Pie Baking Contest, Sheraton Hotel, Chicago, Ill.

21-23—**Food Brokers' Assn. of Canada**, annual meeting, Chateau Frontenac, Quebec City, P.Q., Canada.

22-24—**Canadian Food Processors Assn.**, annual convention, Seigniory Club, Montebello, Quebec.

27-29—**Virginia Canners Assn.**, 52nd annual convention, Hotel John Marshall, Richmond, Va.

March

3-4—**Pennsylvania Canners Assn.**, annual workshop, Allenberry Lodge, Boiling Springs, Pa.

3-4—**Better Foods for Better Nutrition Conference**, Center for Continuing Education, University of Georgia, Athens, Ga.

6-10—**National Assn. of Frozen Food Packers**, 19th annual convention, Conrad Hilton Hotel, Chicago, Ill.

13-16—**National American Wholesale Grocers' Assn.**, annual meeting and convention, Palmer House, Chicago, Ill.

14-15—**Tri-State Packers' Assn.**, annual spring sales meeting, DuPont Hotel, Wilmington, Dela.

19-23—**National Peanut Council**, annual convention, Stardust Hotel, Las Vegas, Nev.

20-22—**Canners League of Calif.**, 56th annual meeting, Santa Barbara Biltmore, Santa Barbara, Calif.

21-24—**Institution Food and Supply Show**, New York Trade Show Bldg., New York, N. Y.

Merchandising Calendar

Feb. 1-29: Better Breakfast Month (Calif. Raisin Advisory Bd., P. O. Box 1963, Fresno, Calif.). POP-ADV

Feb. 4-13: Natl. Kraut & Frankfurter Week (Natl. Kraut Packers Assn., 202 S. Marion St., Oak Park, Ill.).

Feb. 6-21: Take Tea and See Week (U. S. Tea Council, 16 E. 56th St., New York, N. Y.) POP

Feb. 12-22: Natl. Pimiento Week (Assn. Pimiento Canners, 810 Walter Bldg., Atlanta, Ga.).

Feb. 15-22: Natl. Cherry Week (Natl. Red Cherry Inst., 35 E. Wacker Dr., Chicago 1, Ill.).

Feb. 15-28: Nationally Advertised Brands Weeks (Chain Store Age, 2 Park Ave., New York 16, N. Y.).

Feb. 18: Natl. Cherry Pie Baking Contest (Natl. Red Cherry Inst., 35 E. Wacker Dr., Chicago 1, Ill.).

Mar. 2-Apr. 17: It's Fish'n Seafood Time (Natl. Fisheries Inst., 1614-20th St. N. W., Washington 9, D. C.). POP

Mar. 2-Apr. 17: Canned Salmon Lenten Promotion (Canned Salmon Inst., 200 Coleman Bldg., Seattle 4, Wash.).

Mar. 5-12: National 4-H Club Week.

Mar. 6-12: Natl. Peanut Week (Natl. Peanut Council, duPont Circle Bldg., Washington 6, D. C.).

Mar. 20-26: Natl. Rice Week (Rice Consumer Service, Realty Bldg., Louisville 2, Ky.).

Apr. 1-30: Cereal & Milk Spring Festival (Cereal Inst., Inc., 135 So. LaSalle St., Chicago 3, Ill.).

Apr. 1-Nov. 30: Strawberry Point-of-Sale Promotion (Calif. Strawberry Advisory Bd., P. O. Box 57, Santa Clara, Calif.).

Apr. 17-23: Honey for Breakfast Week (Am. Honey Inst., 114 No. Carroll St., Madison 3, Wisc.).

Apr. 30-May 7: Natl. Baby Week (Gerber Baby Foods, Fremont, Mich.).

May 7-14: Natl. Frozen Food Week (Natl. Frozen Food Distribs. Assn., 60 E. 42nd St., New York 17, N. Y.).

May 19-28: Natl. Pickle Week (Natl. Pickle Packers Assn., 202 So. Marion St., Oak Park, Ill.).

June 16-25: Natl. Mayonnaise & Salad Dresing Week (Mayonnaise & Salad Dressing Mfrs. Assn., 332 S. Michigan, Chicago 4, Ill.).

I.F.T. Sections Calendar of Meeting Dates

Western

Oregon: Jan. 5, 7:00 a.m., at Olympic Hotel, Seattle, Wash., Carl Rietz, professor, Mills College, on "Comparative Food Preparation." It will be a joint meeting with Puget Sound Section.

Puget Sound: Jan. 5, 7:00 a.m., at Olympic Hotel, Seattle, Wash., joint meeting with Oregon Section.

Rocky Mountain: Jan. 8, 7:00 p.m., at American Legion, Denver, Colo., Get Acquainted meeting and Installation of Officers.

Midwest

Chicago: Jan. 11, 6:00 p.m., at Midland Hotel, James W. Bannon, partner, Booz, Allen & Hamilton, on "New Products—Their Creation and Management."

Indiana: Jan. 8, 5:30 p.m., at Atheneaum, Indianapolis, Ind.

Minnesota: Jan. 19, Wives Night, Dr. Ernest Guenther, Fritzsche Brothers, Inc., on "Essential Oils of South America."

Ohio Valley: Feb. 26, 1:00, at Ohio State University, Columbus, Dr. J. B. Brown, director, Institute of Nutrition and Food Technology, OSU, and Dr. I. Hutchings, H. J. Heinz Co., Pittsburgh, Pa., on "Public Health Aspects of Food."

Eastern

New York: Jan. 20, 6:00 p.m., at Brass Rail, New York City, Dr. K. Durrenmatt, pres., Western Hemisphere Research Inc., on "Instant Beverages."

Northeast: Jan. 19, Dr. John M. Sharf, Research and Development Center, Armstrong Cork Co., on "Modern Packaging Development."

Philadelphia: Feb. 2, John Bard, Oscar Mayer Products, on "Application of Quality Control in Meat Processing."

Pittsburgh: Jan. 12, 6:30 p.m., at Royal York Apts., C. R. Helwig, USN, medical photographer, Washington, D. C., on "Nutrition Survey in Equador," a layman's viewpoint for section's Ladies Night.

Canning Revolutionizes Foods in 150 Years

Nineteen-sixty is the sesquicentennial of the tin can, and of the commercial application of the canning method.

In 1809, 151 years ago, Nicolas Appert of France won the 12,000-franc award from his government for developing the method of sterilizing foods in hermetic containers by means of heat. But it was in 1810, just a century and a half ago, that he published the first report on the subject. And it was in 1810 that Peter Durand of England secured patents on the use of a tin-plated steel canister in Appert's process.

The World's Habits Were Changed

It is almost impossible for us today to realize what a food revolution was begun by those early discoveries.

Before the 19th century, man had to subsist on whatever foods were available in fresh form in his area, except for some dried, smoked and salted products. If he lived in a poor crop region, he fared badly the year around, and even in the richest agricultural sections he had little but grain to see him through the winter time.

In addition, his wife had to put in long hours in the kitchen preparing what foodstuffs were available, for all such materials came to her in the roughest form imaginable—uncleaned, still covered with husk or skin, and of course never seasoned or blended.

The Contrast of 1960

What a change we see today!

Salmon, once available only in the fall and only in communities close to the Pacific Ocean, now is enjoyed the year around, and the world around.

Pie cherries are as plentiful in Los Angeles in February as they are in Michigan in July and August.

Florida orange juice, California apricots, Wisconsin milk, Illinois beef, Minnesota corn, Texas tamales, Hawaiian pineapple—these and hundreds of other foods which once were the specialty of a single district, can now be enjoyed any month, in any country in the world—thanks to the tin can.

More than a fifth of all the fruit U.S. citizens eat today comes from the can, and more than one-seventh of all vegetables. Better than 40% of the fish we consume is in canned form, plus a large and growing proportion of our meat, poultry, milk, fats, beverages and miscellaneous foods.

E Pluribus Unum

"From many to one," so often used to describe our country, also could be the slogan of the U.S. canning industry, to explain the tremendous growth of the past century and a half. Many, indeed, have contributed their talents to make the business successful.

We owe a great deal to the manufacturers of equipment and supplies—whose latest products will be on view this month of January at the annual canners' show in Miami Beach, Florida.

We are indebted to the food technologists—those in government service, those in the field of education, those in private and industry laboratories.

We are under obligation to agriculture for the improved raw products available to the business—to the farmer who grows them, and to the scientists behind him who have developed better varieties and more productive cultivation techniques.

Sharing the Knowledge

The greatest single share of credit for building the canning industry from zero to an annual output of 800 million cases of shelf-pack merchandise, however, belongs to you in the canning industry itself. By a spirit which has combined pioneering with information-sharing, you have played the major role in the development of your business.

The manner in which the U.S. canning industry has learned to work cooperatively together for the general good is not always fully understood.

In part it is from plant to plant. I have many times had the experience—as I am sure all of you have—of visiting an establishment in our industry in which some new machine or method is being tested, and of finding other neighboring canners on hand, usually by invitation, to watch the test runs. And on countless occasions production men call back and forth for a quick word of advice or the loan of a piece of equipment or of some supply item.

Special Annual Get-Togethers

Short courses and technical conferences, sponsored by industry associations, by colleges and by combinations of the two, provide major opportunities for these exchanges of information. In Wisconsin, Ohio, Indiana, Minnesota, Pennsylvania, Illinois, Michigan, Washington-Oregon, the Tri-states, New York, California—in almost every state in which there is a canning industry, meetings on raw product and/or processing problems are regular annual events.

Finally, know-how is interchanged through a variety of other agencies—through National Canners Assn.'s efficient laboratories, through business publications like *Canner/Packer*, through consultants, through manufacturers of equipment and supplies.

In the Next 150 Years

Not every U.S. canner, unfortunately, has been equally generous in this sharing of know-how. Ninety per cent probably carry the load, and ten per cent try to get the free ride. Incidentally, it has been my experience that the secretive firms, by and large, have the out-of-date plants. Cooperation is a two-way road; when they haven't given, they haven't received.

The next century-and-a-half promises to see the canning industry continue to expand and diversify. Let us hope that, as it does so, it will continue to keep this unique spirit of helpfulness which has characterized its history to date.

El Stark
Editor

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